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Southwestern Society of Orthodontists Silver Anniversary Meeting

A BRIEF HISTORY OF THE SOUTHWESTERN SOCIETY OF ORTHODONTISTS

PAUL G. SPENCER, D.D.S., BOERNE, TEXAS

WE ARE most happy at this annual meeting to be celebrating our twenty-fifth anniversary—our Silver Jubilee. From a very simple beginning with an organization of only eight charter members, we now have a membership of eighty from a territory composed of five states—Kansas, Oklahoma, Arkansas, Louisiana, and Texas. We enjoy the privilege of having fifteen honorary members. Four of them have passed away, as have an equal number of our regular active members. We miss them. We deeply regret the loss, and we cherish the memory of their friendship, good fellowship, and the efforts they made to promote the progress of our society.

This Society was organized to promote the advancement of orthodontics in the Southwest, to serve as a means to encourage united study of our problems, and to provide for the exchange of ideas, opinions, and methods of practice which would benefit all members. Therefore, we can today, with justifiable pride, look back upon the accomplishments of this Society.

Our meetings, while always most informal, have provided a forum for a frank discussion of each member's views and opinions regarding the many and ever-increasing problems incident to the practice of our specialty.

A brief review of our programs give us ample evidence that a major portion of the most prominent and distinguished leaders of our profession from outside our society have been our guest essayists and clinicians. Some of them

Read before the Silver Anniversary meeting of the Southwestern Society of Orthodom-tists, Oklahoma City, Okla., Jan. 21, 22, and 23, 1946.

have made several return visits. All members of the American Association of Orthodontists and its component societies are always more than welcome to attend our meetings.

We have made it a practice in our society not to limit our course of study, but to seek the views of the proponents of all the many and varied types of treatment. We might at times and to a degree differ with all expressed views, but in each and every instance great benefit has been gained in frank discussion and in careful evaluation of the opinions presented.

Where could you find a more desirable field and location in which to practice? Where would, or could, you find a group wherein the spirit of good fellowship and cooperative companionship is in greater evidence? The environment of the society has not permitted the intolerance of any views or opinions, nor has it permitted us to accept any unproved statement as a definite fact.

We have a territory opened by the old Santa Fe and Spanish trails, with a part of our area once comprising a free and independent nation. We have a Southwest which gave us a Will Rogers; a political party with Sockless Jerry Simpson; Longfellow's saga of Evangeline; extensive diamond fields; a Carrie Nation; Opie Reid; General Frederick Funston; Sam Houston; General Eisenhower; O. Henry; an Alamo with its heroes which unlike Thermopylae sent no messenger to report. Yet with hindrances of the boll weevil, dust bowl, Judge Roy Bean, the James and Dalton Boys, not to mention Bonnie Parker and the present-day crop of gunmen, and a sprinkling of Republicans—it has survived and prospered.

This area, which can supply the major portion of the nation's needs, and probably does—in oil, cotton, grain, and meat, to mention only a few—becomes the land of "milk and honey"; hence, it is reasonable to presume that it would also produce a creditable showing in the practice and progress of orthodontics, and in such an environment, regardless of any past, present, or future handicaps, continue progressively forward.

Your committee reports that each section of our territory has practically the same history regarding the development of our specialty in their respective states.

Every progressive practitioner of dentistry soon notes, early in his professional life, that many dental ills arise and flourish due to malocclusion of the teeth. A certain percentage sought to find ways and means to correct such conditions. Some of them were more successful or earnest in their efforts. These men attracted and interested others in the correction of such abnormalities. With Dr. Angle as the accepted leader of these early pioneers, we find that the specialty of orthodontics was born.

Our territory contributed Dewey, Brady and others; and a few years later a number of our future members became the first men to limit their practices to orthodontics in their respective states.

The Society is especially proud of the fact that, due to the efforts of our members in Oklahoma, this State in 1935 became the first to enact a law requiring practitioners who desired to specialize in the practice of orthodontics

and to so announce, to secure a license for that privilege. Kansas later did likewise, as did Michigan. Many other states are preparing similar laws, but some delay has been encountered due to disruption by war.

We should also take pride in the fact that, due to the efforts of members of this society over a period of years, many former "quack" laboratory advertisements have been eliminated from the better dental journals and also from all but one trade journal. In passing, it might be mentioned that the official journal of the American Association of Orthodontists and of this society was the first to sponsor removal of this type of advertising. Please understand, this improvement was made with a full realization and appreciation of the fact that our specialty was born and grew as a result of the initial efforts of general practitioners; but it had become so definitely apparent that a mechanical apparatus is not the total and final cure-all to correct malocclusion. It has its place, but its manipulation and control is of far greater importance than the ability to construct it, regardless of the type of mechanics employed. Hence, it is well known that real and lasting harm can and has occurred as a result of treatment designed and directed by a laboratory technician. Such methods rapidly become a pseudo legal racket working on the credulity of the dental profession and a gullible public.

It is the opinion of the committee helping to prepare this report that the demand and desire for orthodontic treatment is ever increasing; that the dental departments of our universities are enlarging the scope of teaching orthodontics to the undergraduate student; that a larger number of general practitioners are devoting more time to this phase of dentistry; that the field of opportunity is growing; that an increasing number are entering the practice of the specialty. Hence, it is vitally important to the future of orthodontics in the Southwest that this society, by word, deed, and practice, demonstrate, and impress upon those who may enter our society and, indirectly, those who devote some of their time to this phase of dentistry, that orthodontics in the Southwest can progress only to the extent that one and all gain a better understanding of the basic fundamentals of the practice of the specialty.

This history or report should name many individuals and enumerate to some extent their achievements and the efforts made, before and after this society was organized. Time does not permit, nor will we make the attempt for fear of overlooking some who might be the most deserving. It will be noted that the entire membership will be found serving as the most active workers in their local, state, and sectional dental societies. This is due, to a great degree, to the type of individuals who compose our membership, and it is equally true that as one becomes enthusiastic and studious and seeks to improve his ability to practice, he willingly works, aids, and serves in all his dental societies. It is not a farfetched supposition to believe that some credit for this display of willing effort is due to the pattern and example that is always evident in the methods and management of the activities of this society.

The abundant energy of youth is a wonderful asset to any organization. It may not be amiss to mention that the older members have all served the society

efficiently and well. They know from experience the boom times of the twenties and the difficulties of the thirties. As the older members become less active in the future management of the society, we find we are in the boom times of the forties.

As the younger men direct the future of this society, they should be ever mindful that a history of its past shows it has served a worth-while purpose; that successful individual progress is not determined by financial gain, but by the continual improvement of the services rendered to one's patients, which is the principal reason for the continued existence of this society.

This society, founded by an enthusiastic and energetic group, continually improved by the addition of new blood, has done much over the years for each member. Personally, I know of no other contact that has been of equal benefit to me in my practice.

With a continuation of past policies and cooperative associations, there can be no reason why this society cannot be a tenfold greater factor in helping each member during the next twenty-five years than it has been since its organization.

On behalf of the members of the Committee who served with me, I thank you.

COMMENTS ON OUR HISTORY

A. B. BRUSSE, D.D.S., DENVER, COLO.

The first draft of your program reached me with my name as essayist. Later the bulletin arrived with the assignment as a discussor, along with Dr. Fletcher. After going through the complete program, I could find no essayist who rated two discussors. Instead, each essayist had an aid, and the duties of the so-called aid to the essayist were to help with his physical needs and property. I was then sure that the printers had made another error and that I was to act as Dr. Pollock's bodyguard. After some correspondence with Pollock, it was agreed that I was to be his little helper and present a "quickie" on the now hot subject of "socialized medicine." Our first reaction to this bill is: Why should this man, Wagner, suddenly spring such an idea on us? Hasn't our professions made giant strides and reached an enviable position in the world? There must be something that the Washington bureaucrats have been cooking up in private sessions; probably a bid for political support of a large group of our fellow citizens. Perhaps so, but one feels that there are other important considerations.

For a good many years we have heard a good deal about social trend. It is an intangible sort of thing, but we all understand what it implies. Community chest, welfare work, and various other agencies and groups that strive for general social improvement reflect the tendency. The greatest agency, the one nearest to us and best understood, is the United States Public Health Service. Many of its activities, however valuable, have taken patients and income from the professions, yet none of us would for a moment impede its progress. In that respect, we too have become socially minded. The Rocky Mountain Association of Orthodontists, during the past three years, has prepared and is about to present to the Colorado public health group, a classification of orthodontic anomalies that are, we think, detrimental to health. Director Downs approved of this project and will present it to the national board when completed. The prime object of this enterprise was to place orthodontics on the same plane as orthopedics. Unknowingly, we were contributing to socialized medicine.

We also have our trends in education. The present-day students are studying economics and biology, and the causes of crime and poverty are dissected in a scientific fashion. So here we are—some 150,000 physicians and 70,000 dentists strong, able and willing to work, and, in normal times, many without enough to do, and still there is much work that should be done. It does not take a too clever fellow with an urge to improve or reform, for whatever reason, to see at a glance where improvement could be made. It lies in an effectual application of this highly trained group to the whole society; that appears to be the fundamental. When we are annoyed by those outside the profession who are anxious to extend medical care, we might remember that they are viewing us objectively and as a group, and realizing the value of what we have to offer, their concern

is not what will happen to us as individuals, but rather how they can speed up what appears to them to be necessary adjustments. In the main, they are doubtless well-meaning folk and not to be construed as enemies of our group. Certainly there is one point that does admit of much argument: either the public is getting the most out of what they are entitled or they are not. Just now the medical and dental journals are concerned with the passage of this bill. Information from some sources indicates that it is certain to pass; equally reliable sources say, not, that it will never come out of the committee. Many seem to feel that the professions will be finished if this bill passes; others, and there are not a few, are more or less indifferent. From this, one gets the reaction that the medical and dental profession is not 100 per cent behind any thought of fight to maintain the status quo. It would not be surprising if recent graduates would prefer to work for the Government than to try to compete with the older and established medical men, particularly if, as is predicted, "hard times will soon be knocking at our doors," but how are we to avoid change? Even if the Wagner bill had not made its appearance, it is something, I am sure, that the majority of us are at loss to state.

Somewhere I read that democracy is not an easy form of government because it is never static. It is a changing organism with a continuous shifting and adjusting of balance between individual freedom and general welfare. The professional politician, remember, is a practical man. By and large, he is a theorist and usually knows where he is going and why; but do not count on him to confide in you. No doubt, if our numbers were large enough, we could be organized to a solid voting group. We might have some voice in our destiny. The difficulty lies in the fact that others seem to know us better than we know ourselves, and we can be confident that if we amounted at all politically, we would have been approached long since. The one major check on the Wagner bill is the proposed tax to finance it. It is hard to see how additional taxes can be assessed at this time. This may call for a modification in the plan, but we will probably see it in some form or other.

In President Truman's proposal, he suggested that medical cost should also cover dental care as fully and for as many of the population as available professional personnel and the financial resource of the system permits. This is an admission that the dental health program will be limited. The American Dental Association, through its Council on Dental Health, has issued a dental health program for the United States, in which it points out that, for the practical reason of efficiency and available man power, the dental health can best be maintained by early care, and because of man power limitations in dentistry, care of the children's teeth is the only way by which the staggering load of uncared for dental defects can be effectively reduced. Such a program has the approval of everyone and will probably be the form in which dental health care will be given to the public.

In the meantime, no harm can be done by putting our house in order. We should demand our share of the funds for orthodontic research, increase our man power by establishing orthodontic internship with adequate compensation in our dental colleges. This might be the golden opportunity for orthodontics.

1558 HUMBOLDT STREET

WELCOME TO OUR RETURNED VETERANS

T. G. DUCKWORTH, D.D.S., SAN ANTONIO, TEXAS

A LTHOUGH this is the season of the year when we are all dealing with figures—closing out books, making up annual reports, juggling income tax records, and trying to total up our Christmas bills—there is no reason why we should not reflect somewhat on the past. Some of us older men of this Society can well remember when we were commissioned in World War I and at its close returned to our respective locations and entered into a program of rearing children to participate in World War II. We sincerely hope that your children will not have occasion to fight in World War III.

We have stood in silent prayer in memory of the dead, and for the parents whose sons and daughters will never return and who have paid the inevitable price of war.

It is the desire of the officers and members of this Society that I convey to you, our returned members, our sincere thanks for your loyalty and for your inconvenience in riding the hazards of the ocean and the currents of the air in an effort to be of service to our Country.

The January issue of *The Journal of the American Dental Association* has been dedicated to the interest of the returning veterans and sets forth almost every available means of securing information for establishing or re-establishing the returning officer in private and commercial practice, in public health, and in the Veterans Administration.

I believe that you will agree with me that, with few exceptions and considering war conditions, you were treated with the utmost consideration and that your advancement was rapid and you were returned to civilian life with a reasonable amount of terminal pay for your readjustment.

Unlike World War I, the dentists of this country were all commissioned as officers in the various services, and, as a result, we as a profession are much stronger than we were previous to Pearl Harbor.

Those who served on the committees of the Procurement and Assignment Services deserve special mention, as these committees have had a difficult task to perform during the war, and mistakes have been few and unimportant as compared with the great service that has been rendered.

Now that actual warfare has ceased and the war is declared officially over, it becomes the duty of every member of this society to establish a firm and sound program of orthodontic service and one that will reflect our appreciation of peace.

To our seventeen returning members we want to extend a welcome with open arms and give you our assurance that selfishness and greed have no place in our present and future planning.

Wishing you a happy and prosperous year in your new localities.

MEDICAL ARTS BUILDING

ORTHODONTIC TRAINING—PARADOX

H. C. POLLOCK, D.D.S.

THE demand for graduate orthodontic training today is decidedly greater than it has ever been during the history of the specialty, and the demand far exceeds the supply.

One of the large university dental schools on the Eastern Seaboard is reported to have its classes filled three years in advance. This condition has again created a sharp demand for a short orthodontic course and an acute urge on the part of those interested in taking up the specialty to "short circuit" in some way the formal standard courses that are so well regarded by the specialty.

Graduate and postgraduate study in orthodontics has been a subject much discussed over a long period of time. Most of the training in the pioneer period of orthodontics was done by private teachers, private schools, or by the preceptor method. By the preceptor method a younger man, acting as an associate or helper in office practice, was tutored by the orthodontist.

The Angle School, the Dewey School, and the International School were responsible for much of the so-called basic training that was received by a number of the present-day orthodontists. The pioneer and leader of them all was the Angle School, motivated and inspired by Dr. Edward H. Angle, the "Father of Orthodontics" and the man who practically made the subject a religion unto himself.

Dr. Angle, an idealist, a stickler for precision and efficiency, succeeded in injecting into his students a burst of enthusiasm that was nothing short of astonishing. This urge had an amazing influence on the early years of the specialty and accounted for much of the driving power of the men who were interested in the subject during its infancy. Few teachers in any department of dentistry were ever endowed with the ability to inspire their students with enthusiasm, as was Dr. Angle in regard to the specialty of orthodontics.

He contended for years, and no doubt rightfully, that dental schools had no course in orthodontics that equipped a dentist to practice the subject properly. Therefore, to him there was only one answer, and that was private instruction to fill the gap unfilled by the dental school curriculum.

He started a school in St. Louis, Missouri, in 1900, for the study of orthodontics, and over the succeeding years it established for itself the leadership of the specialty and trained or gave a start to most of its pioneers. He later conducted his school in New London, Connecticut, and then in Pasadena, California.

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Martin Dewey, a protégé of Angle, established his school first in Kansas City, then in Chicago, and later in New York City, where many men, particularly immediately after World War I, took his eight-week course of training in preparation for the practice of orthodontics.

The paradox to be remembered through all of this is that the practitioner of dentistry has been given a diploma that provides him with the legal and moral right to practice orthodontics. In addition to that, he has been given a license to practice that department of dentistry in the state in which he practices. At the same time it was realized that the orthodontic courses in most dental schools could be regarded as little more than a gesture. Several short courses were tried, sponsored by universities in order to step up the subject for the general practitioner who desired to include orthodontics in his practice.

These latter courses proved largely a failure because it was found that they had the same defects as other courses and that too many assumed such courses to be adequate work for specialization, when it was well known that they were entirely inadequate.

As a result of various private school experiences, some very important defects in orthodontic training emerged that are admitted by practically all who have taken these courses:

- 1. The eight-week courses given by private schools were entirely inadequate at best and could be regarded after all as little more than a basic training period. It was found that the student, following such training, must learn the art of correction of malocclusion by working directly on the patient. This fact revealed that basic courses are only the beginning of orthodontic training and by no means the end or answer to the problem.
- 2. Since the student was thrown on his own, subsequent to basic courses, it was observed that it required months and months of experimental trial and error in practice before he could hope to emerge with even a small degree of skill.
- 3. It was ascertained further that it is physically impossible for the student to attain skill in orthodontic practice until he has first enjoyed clinical experience under the watchful eye of a teacher of ability and experience. The element of time involved in treatment emphasizes the importance of this.
- 4. It was learned that there is a "knack" to this work. It must be mastered and understood, like the whip of a fly rod or the snap of a golf club, before the student may hope or claim to be a specialist and an expert. After years of experience many of us still feel our limitations.
- 5. Educational background was found to be important, but, in addition to that, wide experience and training are required for one to become expert in the correction of malocelusion, as in anything else.
- 6. It was found that there is no short cut—mechanical appliances, aptitude, or source of training notwithstanding. To be a good orthodontist and to be regarded as sufficiently expert to become a specialist, time and experience are necessary; otherwise a man can be regarded only as an amateur.

When these facts manifested themselves in such a convincing and practical manner, it was plain that other methods of training, constituting a more satis-

factory and formal approach, must be found if orthodontic teaching was to advance beyond the stage of compromise.

The committee on orthodontic education of the American Association of Orthodontists did a great deal of work over a period of years, until, finally, formal education came into being.

The universities then took over, and most of the private instruction courses bowed out in deference to the more comprehensive plan of the great universities. They increased the length of their courses to a year or more, and in some instances to two years' duration, leading to a degree. For the most part, the universities have done good work with a subject difficult to teach and difficult for the student to master in actual practice. The university teachers now are the first to tell you that time is the essence of orthodontic training.

For a number of months, the American Journal of Orthodontics and Oral Surgery has been receiving numerous inquiries by dental officers in the Armed Forces, seeking information as to the best approach to graduate or post-graduate instruction in orthodontics. The problem now is a difficult one to answer on account of the dislocation of the times.

Probably much of the inspiration for taking up this work is aroused as a result of the provisions in the GI Bill of Rights, wherein members of the Armed Forces may secure additional education at government expense.

It is obvious (if many letters can be considered as a criterion) that there is an urgent demand for a course of short duration. The average army officer, being of more mature age and experience than the recent graduate, obviously feels that a short course is more adapted to his particular situation, and that the long training creates a difficult barrier for him to surmount, just at the time of his separation from the Armed Forces.

The Journal being anxious to supply the best information possible and at the same time to keep in mind the over-all picture of the future of orthodontics, asked a number of the leading educators, who devote much of their time to orthodontic graduate work, their opinions pertaining to this extraordinary demand for orthodontic training at this time.

In this connection, while no editor agrees with everything he publishes, he hopes that out of the welter not only will the truth appear, but also that the more discussion the more likely the solution.

In reading the letters received from orthodontic educators, certain over-all impressions are quickly gained:

1. At present there is the greatest demand for graduate training in both orthodontics and dental oral surgery that has appeared in all time. The university courses are at the moment unable to supply the demand for orthodontic training on account of lack of space and a limited teaching personnel.

2. There is little inclination to solve the problem by going back to short basic courses because it is thought by most of the experienced educators that such a course is a compromise of the subject and an injustice to the student.

Probably the current thinking on this subject can best be gained by quoting pertinent paragraphs from letters received from those who head graduate orthodontic education in some of our leading universities.

A Midwestern teacher in one of our large state universities says:

It appears to me that a good course in orthodontics requires a certain time element as well as good course content. Unless the men being trained have time to see the results of their efforts and the changes that may be brought about by either good or poor therapy, they miss one of the most important adjuncts to good orthodontic training. It is the consensus of opinion of most of our graduate students, on the completion of their course, that, if they had about six months more to apply what they have learned in the treatment of cases, they would be better orthodontists. Our course covers a period of fourteen months minimum which is about as short as any good course ought to be.

A head of the department in the Far West says:

As for our own school, I might say we are now organizing a new faculty and hope in the near future to again resume our graduate work. We are going to stick by our ideals and work toward perfection. Of course, we do not expect always to attain this goal, but we feel that we will accomplish a great deal more by aiming high and utilizing all possible available knowledge of the basic sciences, especially those concerned with growth and nutrition. We will not be able to take over fifteen graduate students. We have on our desk, now, applications from nearly ninety men and more coming in every week. What is going to happen to these men whom we will be unable to take? Many of them are outstanding dentists. We anticipate this number will be increased as a result of returning servicemen who arrive back in the States. We have a real problem on our hands.

The head of the orthodontic department of a large Midwestern state university expresses himself definitely on this subject.

I for one would be most disappointed in the officialdom of organized orthodontics if it shows any inclination during the next few years to relax its membership standards in favor of men who have taken short private courses as a result of their inability to get into the various universities for instruction. Men who fail now because of their limited facilities can become orthodontists in the right way if they are willing to wait for a year or two to start, because the present pressure on institutions will, in my opinion, subside after a couple of years. There is no excuse for prospective students, those in charge of orthodontic graduate work, or the officialdom of organized orthodontics to become panicky over a situation for which there is admittedly no remedy. It is a product of the war, and surely the orthodontic profession is not alone in experiencing difficulties coming from that source.

The dean and head of the orthodontic department of another large state university has this to say:

Apparently many men were considering graduate and postgraduate work in orthodontia prior to the war, but deferred such work until they felt they could afford to leave their practices for a year. The army and navy settled that problem for them, and now, having completed their service, they would like to take training before returning to practice. As a result of the sudden collapse of hostilities, a large number have already been released and more are expecting release momentarily. This sudden and unprecedented demand creates a serious problem and one which could well have a marked effect on orthodontia for the next twenty years. There is no question that we need many more orthodontists, but it would be a shame if in our eagerness to do something for the veteran we were to debase the very specialty he wishes to enter. The full year of university work has been accepted by all groups as the irreducible minimum of time in which a man can properly prepare himself to begin practice. Many societies and all specialty boards have written this into their regulations. To offer short courses to these men would be the worst type of deception. In addition to this, there is another human consideration. A man trained in a short course invariably feels himself inferior and frustrated beside the man who has had full university training. In the past a few such men have found it necessary, for their peace of mind, to go back and take the longer course.

For all these reasons I believe that thoughtful men in orthodontics would decry any effort to meet the present demand with a compromise in the form of short courses. This brings us to the matter of meeting the demand with adequate educational procedures.

There are a number of possibilities that occur to one concerning how this demand might be met; the first of which is the expansion of facilities in those schools already offering such work. Difficulties in doing this, however, arise when one realizes that most departments are already fully equipped to utilize the space available to them. Increase in the number of students admitted would require building programs that would not be looked upon kindly by most universities in view of the fact that the present demand probably represents a peak that may be expected to subside following full demobilization. Another difficulty would be in finding sufficient staff. Even if physical expansion were possible, it would be difficult if not impossible to supply the additional teachers required in the localities were the colleges are.

Dr. Oppenheim, a few weeks previous to his death, made the following observation as a solution. He said in a letter to the editor:

Endowments must be made to enable expansion of graduate orthodontic teaching. If every dental college could have a graduate orthodontic course, then these men could remain in their dental offices, continue their practice half time, and attend graduate classes half time, and graduate in two years of half time. The colleges are so located all over the country that most men could attend without driving more than one hundred miles. This, one could do, and, at the same time, not suffer so much financially.

Orthodontic training is not alone in that the demand exceeds the supply during these dislocated times, and in time the situation will, no doubt, remedy itself so that all can be served.

It is gratifying to note that those in charge of orthodontic training feel that there is nothing to be gained in providing compromise courses at this time, thus nullifying much of the slow progress that has been made in orthodontic education.

Surely the following quotation of Wieland applies to the orthodontic training problem. "However learned or eloquent, man knows nothing truly that he has not learned by experience."

PREVENTIVE ORTHODONTICS

PAUL G. SPENCER, D.D.S., BOERNE, TEXAS

It is the usual custom to take certain liberties with the topic assigned for discussion. Since, due to past efforts, the subject is rather thread-worn, it may be of more interest to discuss the prevention—or probable fallacy—of a few of the present orthodontic beliefs. Therefore, let us mention a few things to think about—at least sufficiently to create some discussion.

Admittedly we are very glad that we do not all think alike—or believe all that we see and hear. But there are, I assume, a few present who believe that abnormal breathing tends, to a degree, to hinder—or misdirect—desired growth and development of certain structures which support the denture. If this be true, why should we continue to neglect making some effort to eliminate this hindrance or, at least, to control to a degree its action.

It may be progress to devote much time and study to many allied subjects which enter into the orthodontic problem—factors which direct and supervise certain stages of growth, but over which we do not have, and never will have, the slightest control. I doubt if it accomplishes more than to broaden our outlook. Even this is helpful, but of little real value if we still neglect the very simple things which offer us some measure of control.

To become interested in the correction of malocclusion of the teeth, we assume one would first be well versed about normalcy—to promote normalcy. But like the general profession, wherein the major effort is devoted to constructing artificial dentures, we continue to try to correct a condition, seldom completely successfully, after it is fully developed. There can be no justifiable reason, moral or otherwise, to permit the development of an undesired condition which is mainly preventable, and in later years attempt to correct the results of such a condition. We may claim lack of opportunity at the right time, yet the major portion of every orthodontic practice consists of patients in the mixed denture stage and it has been my observation over a considerable number of years that the greatest neglect of the profession—and it is equally true of orthodontists—has been the failure to supervise and direct the proper removal or retention of the first dentition.

Much has been said about it, but very little is being accomplished. Its importance might be recognized if each of us would list the number of cases under treatment wherein vertical growth is desirable and where we attempt with little success to attain it, with some mechanical force or gadget, or with less success to depress teeth. Through the years we have watched the varied and sundry methods, mostly mechanical, which appeared and reappeared reg-

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ularly, all designed to attain certain tooth positions. Their malpositions were caused principally by neglect of the first dentition.

There is an opportune time which varies greatly in many individuals wherein vertical growth is attained normally and in a gradually progressing degree. It will not be attained by overlong retention of certain deciduous teeth; nor by permitting unequal occlusal stress upon the incisor and posterior teeth of the erupting second dentition; nor can it occur if fixed attachments are placed for overlong periods upon teeth in certain stages of eruption; and it very definitely cannot occur in the maxillary denture during the period that a fixed bite plane, or guide plane, is being worn. I was taught that in gaining vertical growth the major change occurred in the area of the posterior mandibular teeth, presuming that elevation was aided by intermaxillary elastics. Postoperative evaluation of what has occurred discloses that the greatest change toward improvement has been obtained in the posterior maxillary area and in the ramus. If this be true, how can there be any value in any type of treatment which mechanically prevents such growth? The truth of the matter is that normal growth trends occur, to a less degree—even when we hinder it—and we often unknowingly claim credit.

Admitting the possibility of being typed an old fogy, I am not as yet greatly perturbed about new things, which are only old ideas in new garb. I am not concerned about the value of anything which is designed to change normal growth trends. The realization that there is constant individual tooth movement even in untreated cases presenting the most efficient occlusions assures me that any method of tooth positioning, regardless of duration, is fantastic. According to present custom, one must present a new method or be considered abysmally ignorant. In my time I have so frequently heard the cry "Eureka," followed by disappointment. We seek something new because past methods have failed. Why? Mainly because an attempt was made to pattern growth to our conception or design. Pressure applied to living tissues which have an inherent prescribed plan and schedule to follow produces entirely different end results from the same forces applied to inanimate matter. But most of our mechanical forces are designed and applied on this unequal basis.

To exploit a new theory excites instant approval; to discuss normalcy, to seek its promotion, or to prevent anomalies is of only passing interest.

The positioning of certain incisor teeth at a definite angulation is proposed as a basic requirement; yet we find that the molar teeth which bear far greater occlusal stresses, are not always positioned over basal bone in normal untreated cases.

The trend of dental growth from infancy to adulthood is forward and downward—to a degree which in one individual is considered normal, and in another is classed abnormal. One might ask, what was normalcy in the distant past, from which we inherit? If something is wrong in harmony as we see it, what is it? Does the entire trouble arise from, and only from, the dental area? Are we attempting to move the mountain to Mohammed? Would

it not be more practical to try to prevent Mohammed from straying too far from the mountain?

Rather heated arguments occur about the amount and direction of tooth movement. We need not be overly concerned about preventing bodily tooth movement, for if it occurred as claimed, one could easily support several fulltime exodontists, and our practice would shortly seek the prosthodontist. My belief is based upon the impossibility of movement against growth trends; the realization of the limited space available for the extensive movement claimed; the study of unnumbered x-ray views of reported movements; and the views showing loss of tooth structure as a result of applying even less positive forces. Any attempt to change the normal forward inclination of the teeth, or, as we are advised, to "upright" teeth, is basically wrong, since in normalcy opposing teeth approaching occlusal contact travel in the arc of a circle, and should do so if the stress of mastication is received through the long axis of the tooth. The results of what occurs when we hinder normalcy are easily shown by x-ray views of tooth-supporting appliances, and the abutments of fixed bridges under abnormal directional stresses. In view of this it becomes difficult to follow the stiff-necked believer who considers that any neck would be able to retract an entire denture. We are in the atomic age, but not as yet in the age of magic.

The history of orthodontic practice and its accomplishments is truly remarkable, especially so when we realize the approach has been mainly mechanical. The primary urge was to apply force; hence it is easy to understand that in time we conceived a man-made pattern of what the finished result should be. Our diagnosis of what was wrong was based on this pattern of so-called ideal occlusion, with little if any consideration of hindrances involved in attainment. By mathematical diagnostic systems we now propose to raise or lower the plane of occlusion, as we may deem it necessary, and as a pastime move the denture forward or backward—and all of this, mind you, when there is abundant proof that no individual normally presents such perfect symmetry between the lateral segments in the entire body. Nor is it possible to find, in normal untreated occlusions, perfect symmetry, regarding the midline, the plane of occlusion or in comparable exactness of the right and left condyle path. No two individuals follow the same movements in mastication and no individual places exactly equal occlusal stresses on both sides of the denture. In view of all of this, we still believe that with multiple fixed attachments we do not produce unknown pressure reactions until a musclebound status exists; nevertheless an ever-increasing percentage of so-called double protrusions are produced. It reminds me of the physician who admitted his inability to treat carbuncles, hence he always burned out the infected area as he was an adept in treating burns.

Much water has gone over the dam since the Fouchard era when it was proposed to draw and force teeth toward the midline, with extractions as an aid in attaining a smaller arch, and the Angle theory of arch expansion. Now it is proposed that 70 to 80 per cent of all cases requiring treatment must first, regardless of age or stage of development, be relieved of a certain number of

teeth. Considering the anatomic changes that have occurred and continue to occur through the eons of time, it appears reasonable that Nature would have long ago eliminated certain dental units, providing it was more essential to promote (man-made) esthetics, than to maintain greater masticating efficiency.

We realize that one's viewpoint often changes. The outside observer with ample time can compare the past with the present and perhaps wonder about the future. One may recall that osseous tissue growth is not retarded but only malformed by the custom of binding the feet in infancy; that bone is not developed to support and resist stress; as an example, the osseous support of the canine tooth of the squirrel is made more compact as a result of "pull of force" in the same manner as it develops in reverse action to muscle tension. Evidently similar reactions would result from applied pressure of an orthodontic appliance and it is equally evident that atrophy and loss of tissue will and does occur under excessive pressure or trauma.

The guiding influence of the deciduous teeth is recognized, and careful observation of the normal discloses that deciduous teeth after complete eruption do not change their occlusal plane even when opposing stresses are lost. Nor do they "drift" out of position, regardless of space, either mesial or distal, except as it might occur from the force of an erupting permanent tooth; and even then not from its normal replacement. Thus it is very evident why certain deciduous teeth should be retained, or removed, all of which is determined by the first evidence of a developing malocclusion, as a justifiable aid in promoting normalcy. A very common example of neglect is the loss of the deciduous canine previous to the first deciduous molar. The normal alignment and efficient occlusion of the permanent teeth, either posterior or anterior, are vitally dependent on maintaining the total deciduous caninemolar space during a certain stage of development, and equally dependent on timely removal, in proper sequence, of the teeth in this space, to permit normal eruption and drift. The practice advocated of premature removal of the deciduous canine with retention of the space maintained by attaching an appliance to any partially erupted permanent tooth (or teeth) is a direct hindrance to normal development. Examine a few hundred or more x-ray views of normal deciduous dentures and note the stages of development, and the positions of the unerupted permanent canines and premolars. The retention of the first deciduous molar, and its removal at the opportune time, has a very definite and positive influence in aiding normal alignment of the incisor teeth, and is far more important than the "theoretical worry" about basic bone.

It is an obsolete practice of neglect to permit the deciduous teeth to be lost in haphazard fashion, or to retain them overlong, simply on the basis that some may be loose and others appear to be firmly attached. This phase of prevention is in reality a very simple procedure, if all decisions of retention or removal are made on the basis of normal, for each stage of development. Few realize its full possibilities, not only in the general and most common types of maloclusion but also in the less common congenital absence conditions.

To advocate and continue to make mathematical surveys of teen-age youngsters and to prescribe precision exactness of teeth and denture location, seldom attainable, and less frequently maintained, should cause us to wonder why more effort and study are not given to practical preventive measures.

The observer finds it difficult to understand up to the present time, at least, how teeth, single or multiple, can be moved, regardless of direction or distance, without permanent harm. Marked changes in tooth positions are made and do occur without any change in the position of the apex of the root. A change in inclination tends to produce an optical illusion. Diagrammatic drawings do show what should occur, provided the force, the fulcrum, and an "east wind" work in mathematical order and in correct degree. Spacing of teeth, especially the premolars, while normal in some lower animals, is not a common occurrence in man, but when present I have never seen such spaces closed and, more important, remain closed due to mechanical action or force. Permanent closure of similar spaces between upper and lower incisors remain completely closed after treatment, only when the apex of the roots of the spaced teeth were in apparently normal position before treatment. In view of this, one wonders what degree of success is possible in closing spaces artificially created. Examination of many postoperative x-rays of such cases show the apex of the roots of the teeth mesial to the space to be approximately in their original positions, and those distal to the space either likewise or the change, if any has occurred, is due to forward drift, even though the plan of treatment and the force applied has been directed to attain just the opposite The evidence of plaster casts, even cross sections, prove nothing regarding root movement. Distal inclination of the crowns is all that has occurred, and even if this were maintained, which fortunately it is not, the teeth in such positions would not receive the stress of occlusion through the long axis as they should normally. Equally misleading is the evidence presented with superimposed extraoral x-ray views, wherein the teeth are portrayed in color to give assurance that the entire tooth has moved. From experience and much effort, and I am sure others have found this to be true, the probability of exactness of superimposed x-ray views of the same patient made at periodic intervals of months or years becomes only a mythical hope.

The area under study is in a constant change of varied directional growth. No definite guide exists even if it were possible to make each succeeding view at the exact duplicating angle. Yet the evidence proposes to show complete tooth movement in definite millimeter measurements. Let us be practical but not pseudoscientific.

The root apex does move normally as development and eruption occur and as it follows normal growth trends, but it is not, nor can it be, moved willy-nilly by mechanical force, with the rapidity assumed or claimed. Even such positional changes as Nature directs are accomplished over a comparatively long period of time, since she is aware, as we seem to forget, that the vitality of the tooth depends upon what occurs at the gateway at the apex. We note the comparatively common occurrence of death of pulp from a very

light blow, which is practical evidence that we cause little if any movement of the apex, even when we attempt to do so. Such changes as we may hope and desire to make in placing the entire tooth in a new position can only be attained as the whole pattern and form of the supporting structures change. Such changes do not occur overnight nor can we trundle teeth up and down the alveolar slot as we assume we do. We all know the full meaning of the word relapse, and the speed with which it occurs, and this should convince us that we have not made such extensive movements as demonstrated on plaster casts.

Another type of apical root movement which should prove something is that which assists the speed of eruption of, for example, a high labially positioned canine. Such movement should be a very simple matter compared to closure of a premolar space. However, if pressure to the same degree is applied, and the crown of the canine is moved with the same speed, for an equal distance, as the crown of the tooth closing a space, we would soon find the canine in somewhat the position of the man on the flying trapeze. The teeth used in closing a space would suffer the same fate if they actually moved as claimed.

Time does not permit a discussion of many additional claims of orthodontic magic. But it is the hope that, as history repeats itself, we do not follow the Good Book literally—"If thine (eye or) tooth offend thee, cast it out," or something to that effect. Also, before we return completely to the Fouchard era may we find out that we cannot radically change normal growth trends—but can only direct them to a very limited degree.

OFFICE ROUTINES

BROOKS BELL, D.D.S., DALLAS, TEXAS

WE HAVE found in our office that much time can be saved if definite routines are followed in handling what might be termed the "paper mechanics" in regard to our patients. Some of the ideas which we have worked out follow:

When a new patient comes in for diagnosis, an assistant seats the patient in the operating room and then fills out a case history card on which is listed the patient's name, birthday, address, and phone number, and the parents' initials, address, and phone number; also noted on this card is the name of the person referring this patient. The assistant then takes this card and checks the credit rating; this is noted on the back of the card in the space provided for this information. All this is done before the doctor sees the patient. The doctor then goes in and confers with the patient concerning the case. This card is filed for future reference.

If it is necessary to send the patient out for x-rays or operative work, a reference slip is made out in triplicate—the original for the patient, a copy for the doctor to whom the patient is being referred, and a copy for our file.

YOUR NEXT APPOINTMENT IS

DR. BROOKS BELL DR. JOE FAVORS Practice Limited to Orthodontics 1208 Medical Arts Bldg. PHONE RIVERSIDE-1631

Fig. 1.

The patient is then given an appointment for the next visit on the appointment slip which is shown in Fig. 1. This appointment slip is printed on a bright pink paper which makes it easily seen and a constant reminder to the parent that the child is due to come into the office. All appointments are controlled from the chair—that is, as to when the child is to return, the type of appointment it is to be, and the length of time for the appointment. This is accomplished in the following manner: if we wish the child to return in three weeks, a dot is put over the u in your on the appointment slip; if in two weeks and a half, a dot is placed under the o and so on; if we wish the child to return in the morning we place a dot in front of the Dr.; in midafternoon over the o in Brooks, and after four o'clock behind the l in Bell.

Read before the Silver Anniversary meeting of the Southwestern Society of Orthodontists, Oklahoma City, Okla., Jan. 21, 22, and 23, 1946.

The patient then takes the appointment slip out to the secretary who has charge of the appointment book. If a longer appointment is required, two or three dots are used in the place of one as in the foregoing. In the event laboratory work is to be ready for the child on the next appointment, this name is written in red on the appointment slip by the doctor and in turn is entered in red on the appointment book by the secretary. If it is desired that the patient see the family dentist on the next appointment, his name is written in blue on the appointment slip by the doctor and then entered in blue on the appointment book by the secretary. Incidentally, one routine followed by our assistants is to place the patient's name on the appointment book first, then fill out the appointment slip. On the back side of this pink appointment slip are the usual clauses concerning biting on apples, hard candy, ice, chewing gum, working with the appliances, etc.

After the patient leaves, a notation is made on the case history card to send a simple "Thank You" letter to the person referring the case, this letter being sent out within a day or two.

In the event the patient starts treatment, the following Memorandum and Secretary's letter are sent:

Parents' or Guardian's Memorandum Pertaining to Orthodontic Treatment

The duration of time in the treatment of orthodontic cases is more or less indefinite. From experience it has been found that the difficult case is sometimes completed in a shorter period of time than is the simple one, due to the element of cooperation in this specialized type of work. Frequent appointments will not speed up the progress of the case, as proper adjustment of the appliances causes active pressure, producing movement of the teeth for six to eight weeks. Periodically, appliances will be removed to have the teeth cleaned and other necessary dental services.

Inasmuch as orthodontic treatment is continuous throughout the year, charges are made on a yearly basis. Credit, therefore, will not be allowed for missed appointments or extended absence during vacation. A separate bill will be rendered by your dentist for any dental services necessary during the period of orthodontic treatment, as charges for such services are not included in the cost of orthodontic treatment.

Charges for orthodontic treatment are made on the basis of ______ for the first year's treatment. An initial payment of ______ is due at this time, and statements will be sent for twelve equal payments of ______, subsequent to treatment; the first of these will be rendered on (date) 1st. Second year charges are made on the basis of _____ a year, prorated, and statements will be sent for twelve equal payments of _____ a year, prorated, and statements will be sent for twelve equal payments of _____ a year, prorated, and statements will be sent for twelve equal payments of _____ a year, prorated, and statements will be sent for twelve equal payments of _____ subsequent to treatment. In the event the period of treatment extends beyond three years, the yearly charges will be discontinued and a charge of _____ per office visit will be made. The above charges are based upon cooperation of parent and child.

Parent's Name	
Address	
City	
For: Patient's Name	
Date	

Secretary's Letter to Accompany Memorandum

Dear Mr. _______ Enclosed you will find the first statement for the treatment of your (daughter or son).

We are also enclosing our customary memorandum for your file, which we trust meets with your approval.

Very truly yours, Secretary

This letter immediately shows the parents that the secretary is the person to contact concerning their account.

There are several clauses in the memorandum letter which help clear up in the mind of the patient and the parent many phases of orthodontic treatment that are usually misunderstood. For instance, in the first paragraph it is mentioned that frequent appointments will not speed up the progress of the case, and in the second paragraph explanation is made why charges are made on yearly basis and also that dental services during the period of orthodontic treatment will be charged for by the family dentist.

In the third paragraph, note that mention is made of an initial payment, not an appliance fee. We prefer using this term, inasmuch as it takes us out of the position of selling materials and appliances. We do not like to use the term "fee" in our practice, preferring to say that the cost of orthodontic treatment is so much per year and the initial cost is so much. Also note in the last paragraph that the last sentence is very important inasmuch as it brings to the attention of the parent and the child that their cooperation is absolutely necessary.

Various clauses can be added to this memorandum; for instance in the event that treatment may be divided in two periods, a clause may be added stating that financial arrangements will be made for the second period of treatment when it is instituted.

We use the following "Breakage Letter":

Dear Mrs

months—on _____, and again on _____. Naturally this breakage has resulted in the progress of his case being retarded.

We are wondering if this breakage has been caused by chewing gum, eating sticky candy, or playing with his appliances with his tongue or fingers. Please note if he is doing any of the foregoing.

In view of this unusual amount of breakage, it will be necessary to make the following charges for future breakage: _____ for each appliance and _____ for each band.

With best regards, Brooks Bell

Fig. 2 shows the type of slip we use to notify a patient who has missed an appointment to come in: this slip, like the appointment slip, is printed on bright pink paper. Much time is saved by mailing these slips instead of trying

to reach the patient at home by phone. The appointment is marked on the appointment book with a small "s" after it to show that a slip was sent for that appointment. A similar slip is sent to patients who are on an observation period.

We use the following "Case Completed Letter," which is written with an original and two carbon copies, one of the carbon copies going to the patient's dentist.

Dear Mrs. _____:

Experience has proved in the past that it is wise to have teeth checked periodically even after orthodontic treatment has been completed; so, as is our custom, we will send an appointment slip at the proper time.

The regular monthly charge will not be made, the cost of these checkups being the usual _____ office visit charge.

should go in to Dr. _____ and have (his, her) teeth cleaned, any cavities filled, and the necessary x-rays made within the next few days. *(X-rays should also be made by Dr. ____ at least every twelve months to be sure that the wisdom teeth, which are now forming, do not grow in improperly and cause pressure that might disarrange the other teeth.)* I will be glad to check these x-rays with Dr. ____ for you.

Please have _____ come in any time that you feel that (his, or her) mouth should be checked.

With best regards, Brooks Bell

In the event a retainer is placed, the following "Retainer Letter," which has an original and two carbon copies, one to the patient's dentist, is used. A similar letter without mention of the retaining appliance is written for cases which are placed on observation.

Dear Mrs. ----:

Inasmuch as most of the actual movement of ______'s teeth is almost complete, a retainer has been placed. This retainer does not require frequent visits, but it should be checked periodically, so as is our custom we will notify him of his appointment at the proper time. These checkups are made to be sure that the teeth are being retained in their proper position.

Failure to wear the retainer as directed, which evidences itself immediately on examination, will result in relapse and necessitate retreatment of the case at the usual charge.

The regular monthly charge will not be made. The cost of these checkups will be the usual _____ office visit charge. In case of loss or breakage the usual charge of _____ will be made.

should go in to Dr. _____ and have (his, her) teeth cleaned, any cavities filled, and the necessary x-rays made within the next few days. *(X-rays should also be made by Dr. ____ at least every twelve months to be sure that the wisdom teeth, which are now forming, do not grow in improperly and cause pressure that might disarrange the other teeth.)* I will be glad to check these x-rays with Dr. ____ for you.

Please bring _____in any time the retainer is uncomfortable or seems out of place.

With best regards, Brooks Bell

^{*}Omit if wisdom teeth extracted. See card,

OFFICE ROUTINES

missed regular
appointment onatat
We are reservingfor
another appointment. It is important that this appointment be kept.
If this time is not satisfactory, kindly phone our secretary today.

DR. BROOKS BELL

R-1631

DR. JOE FAVORS

Fig. 2.

We find that to mail a card printed on a yellow background with heavy black ink bearing the words "Wear Your Rubber Bands, Chum" in large type most effectively reminds the youngster to wear his elastics. This card is hung in a conspicuous place and parents say that it is a very fine reminder.

The foregoing are some of the things that we find simplify the paper work on our cases. Inasmuch as these letters are set up in a book to which the secretary can immediately refer, a great deal of time that would be wasted in dictation or letter composition is saved.

1208 MEDICAL ARTS BUILDING

THE EASE WITH WHICH ACRYLIC RETAINERS MAY BE PROCESSED IN YOUR OWN OFFICE

D. P. COMEGYS, D.D.S., SHREVEPORT, LA.

THERE can be no question about the importance of retainers and bite planes in orthodontic treatment. Ordinarily the orthodontist adapts his wires and clasps on a model, waxes his pattern, and has a commercial laboratory reproduce it into vulcanite or acrylic material. Vulcanite, however, has largely been discontinued in favor of acrylic, which is far more pleasing and easy to handle:

In the last few years it has in many instances been very difficult to find a laboratory that can or will handle these cases with the degree of care and promptness that is desirable. As a result of this, a great many men, I among them, have been using a form of acrylic material that is adapted to the model and hardened under a lamp or in a double boiler. This has been a satisfactory and timesaving method; but since the material is not processed under pressure, it is very porous and not capable of being highly polished, and, consequently, not too sanitary or easily cleaned.

At one time I was under the impression that the processing of true acrylic material in the laboratories was quite complicated; but, to the contrary, I have found that it is very simple, and the result of attending to this detail in your own office will prove most gratifying. I know now that many orthodontists have been making their own acrylic retainers and bite planes for some time; but there are probably a number to whom this step is a problem, and I hope that the following description will serve as an introduction to an idea that will make the construction of retainers a pleasure.

Adapt your clasps to the model and wax the pattern as desired just as you would do to send the case to the laboratory. Invest in the lower half of the flask with plaster, completely covering the buccal and labial surfaces of the teeth (Fig. 1, A). The top half of the flask is shown in Fig. 1, B. The cover of the latter is removable so that when the other half is invested, the plaster can be poured in from the top and the cover then placed over it. After the first investment shown in Fig. 1, A has hardened and has been smoothed, cover the entire surface with soapy water for the purpose of separation. Then place the top half of the flask over the lower half and fill with plaster and allow to set.

Now place the flask in boiling water long enough to soften the wax, and separate the two halves. Flush all wax out with boiling water. This will leave nothing but the stone model and the surfaces of the clasps that will be engaged in the finished acrylic, the buccal and labial portions of the clasps being held in position by the plaster investment (Fig. 2, A). The operator should adjust these palatal portions of the clasps so that they stand away from the stone model enough to allow the acrylic to flow under them.

The next step deals with the all-important method of securing a smooth palatal surface for the finished case. We have found Ransom Randolph's Color Guard much easier and better than tin foil, if properly used. It must be applied when the model is still very hot from the boiling water. With the finger tip, smear the entire surface of the model (shown in Fig. 2, A) with a small amount of the color guard, carrying it over the tooth surfaces and the plaster investment as well as the stone model. A very thin covering is all that is necessary and there should be no visible excess. The material will seem to melt into the model smoothly. If it does not, either the model is too cool or you are using too much. Now, allow the case to cool. You will note that there is a thin film of the color guard adhering to the clasps. Remove this with a small explorer; also, any more visible film, for, if properly

Presented as a Table Clinic at the Silver Anniversary meeting of the Southwestern Society of Orthodontists, Jan. 22, 1946, at Oklahoma City, Okla.

B.

used, the amount of the material needed is absorbed into the stone and merely gives it a slick appearance.

The case is now ready to receive the acrylic material. The operator may choose from several on the market, all with simple directions for mixing and treating. We use a small glass jar and mix enough liquid with the powder to give a puttylike mass. This is adapted to the model (shown in Fig. 2, A) and roughly shaped after the manner of the wax pattern, which, of course, it replaces. Use about one-fourth more acrylic than wax, for the excess will be forced out.

When the acrylic has been adapted, place a piece of thoroughly moistened cellophane over the entire mass, allowing it to extend over the occlusal surfaces of the teeth. The purpose of this is to give a smooth surface to the acrylic material and prevent it from sticking to the plaster in the upper half of the flask when it is placed over the lower half.

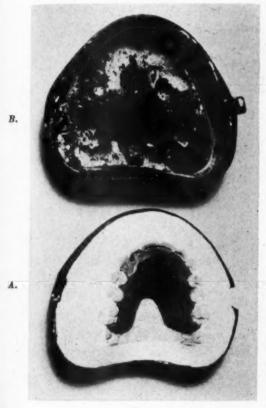


Fig. 1.



Fig. 2.

Now place the two halves together and put in some form of press and tighten until the two halves go completely together (Fig. 3). This will force out the excess acrylic. We sometimes cut waste gates in the plaster in the upper half of the flask to allow the excess to get out more easily. These can be seen in Fig. 2, B at the distal surface. The line shown in the palate of Fig. 2, A is a slight postdam scraped into the model. These are little things that may help but are not absolutely necessary. No heating is required to press out the excess acrylic. In fact we often separate the two halves, trim off the excess, and place a new and smoother piece of cellophane, always thoroughly soaked in water, and then press again.

Now the case is ready to be heat-treated for completion, which consists of the following technique:

With the flask held together firmly in the press, place the entire apparatus in a pan of water and heat for forty-five minutes at approximately 167° F., or just a little too hot

to hold your hand in. Next, bring the water to a boil for forty-five minutes, then turn off the fire and allow the case to cool slowly. The flask should be completely cool before the press is removed and the flask separated. When the case is opened, there will still be some excess acrylic material. It is a good idea to cut away most of this before attempting to remove the case from the model. There will be some little wrinkles due to the creases of the cellophane, but these will come out in the smoothing and polishing. The entire lingual surface can now be trimmed to the desired thickness, and polished. This material permits a very thin retainer, and the wax pattern need only be thick enough to allow for necessary smoothing and polishing, which is done with a sandpaper cone, a buffer wheel with wet pumice, and the final polishing with a cloth wheel and wet white chalk. Fig. 4 shows the finished case. It is a good idea to free the stone model from the plaster investment and place the case on the model to cut away all the excess material and to smooth down to the correct thickness. Nothing should be necessary on the palatal side except, perhaps, to flake off a few small bits of stone that may have stuck to the acrylic. Do not attempt to polish the palatal surface.





Fig. 3.

Fig. 4

One other point that should be mentioned is that after the clasps have been adapted and the wax pattern formed, it is a good idea to cut away some of the stone from around and under the clasps on the buccal and labial surfaces to allow the second investment of plaster to secure a good grip on the clasps, thus eliminating any danger of their slipping out of position.

The following is the equipment needed, which can be secured at your dental supply company: A flask, a press, a box of cellophane, a jar of color guard, and the necessary polishing wheels. The technique is so simple that an assistant who can pour your models satisfactorily can soon learn to process these cases. Briefly, all that is necessary is to adapt your wire and wax the pattern on a good model; then turn over to your assistant to invest, boil out wax, pack with acrylic, and heat treat. You can easily take an impression one day and deliver a finished retainer the next. In addition to the timesaving element, there is an appreciable cost consideration. The average retainer or bite plane can be processed in your own office for about forty-five cents each. The thought of your finished cases, the result of long and tedious effort, having the protection of neat and properly fitted retainers, is comforting.

ANOTHER CASE OF DISTOCLUSION

MARK H. PERRIN, D.D.S., TOPEKA, KAN.

THIS case of distoclusion in a girl, 13½ years old, was first presented as a quiz clinic before the Southwestern Society of Orthodontists in Shreveport, Louisiana, in 1944. Many suggestions as to treatment were given, including the extraction of the upper first premolars. This plan was considered, but I could not see how it would improve the underdevelopment of the mentolabial sulcus.

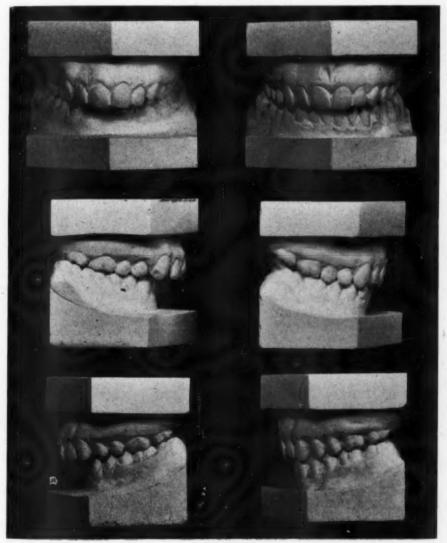


Fig. 1.

Presented as a Table Clinic at the Silver Anniversary meeting of the Southwestern Society of Orthodontists, Jan. 22, 1946, at Oklahoma City, Okla.

The plan of treatment adopted was that of disregarding the prominent mandible and treating as the usual distoclusion. No attempt was made to hold back the mandible. Elastics were worn day and night for about two years. The case was retained with labial arch and elastics at night for four months. Results were recorded two months after all appliances were removed and are now presented before the same group.



Fig. 2.

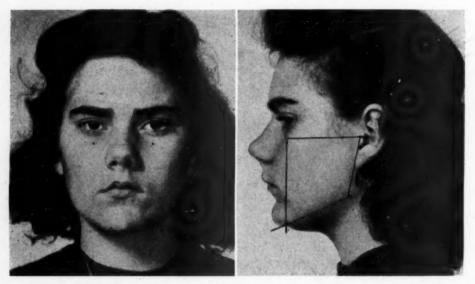


Fig. 3.

The interesting point to me was that apparently the mandible was not disturbed as to position, but that the mandibular teeth moved forward en masse. It is quite evident that the development in the region of the mentolabial sulcus gave the patient a much more pleasing facial contour.

518 MILLS BUILDING

FABRICATING APPLIANCES WITH ELECTRIC SPOT WELDER

T. M. ROBERTSON, B.S., D.D.S., COFFEYVILLE, KAN.

Object of Clinic.-To show the advantage, in fabricating an orthodontic appliance, of retaining the original temper, color, and polish of the original spring bar, bands, and attachments.

Material Used .- Chrome-because of its ease in welding, and freedom from taking stains in the mouth. Anterior bands-140 by 0.004; molar bands-180 by 0.006; spring bars -0.022 or smaller. All measurements for bands are made in the patient's mouth, spotted to minus measurements, then stretched slightly on the band former to fit. All ends

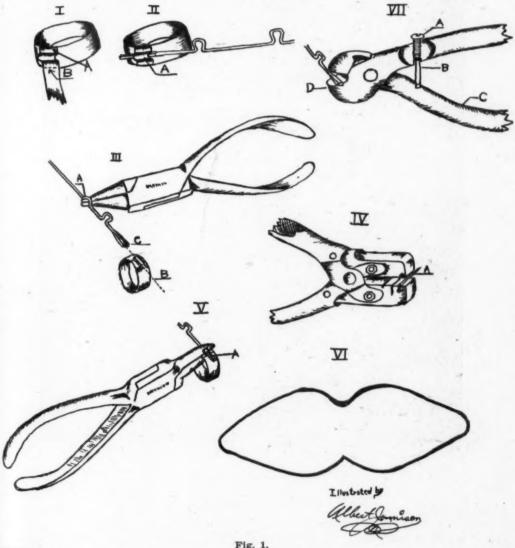


Fig. 1.

Presented as a Table Clinic at the Silver Anniversary meeting of the Southwestern Society of Orthodontists, Jan. 22, 1946, at Oklahoma City, Okla.

of round bars are made rectangular (on the anvil) to take advantage of the torque of bar in maintaining stability of the appliance. I have suggested to the manufacturers that they make us a roller mill, or a pair of sturdy pliers with short leverage (Figs. 1, VII) for mashing the end of bar to rectangular shape—but I still have to use the anvil.

Fig. 1, III demonstrates the use of the round nose plyers in making molar stop loops, or intermaxillary loops. In bending the spring bar "cold," avoid the tendency to breakage, by bending the bar with the fingers, over the points, rather than by rotating the pliers.

When opening the loops for expansion, or closing for condensation of proximal contact spaces, note that the same horizontal position of the bar each side of the loop is maintained before replacing in the molar sheath.

Fig. 2.

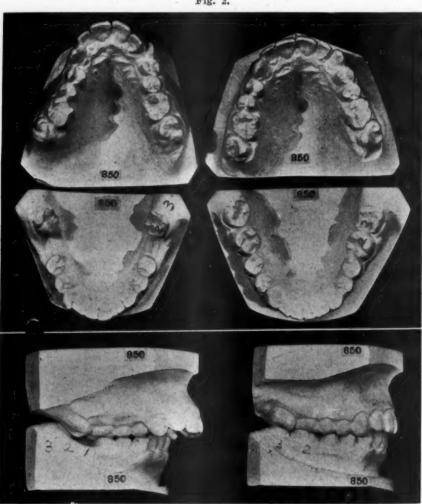


Fig. 3.

Figs. 2 and 3.—Second and third molars have been brought forward.

Fig. 1, IV will be recognized as a pliers put out for making backings for porcelain facings in bridgework. By clamping a short loop of the 0.022 material in the front groove, it makes an ideal instrument for making the first loop step, in fabricating the "tailor made" molar sheath (Fig. 1, I), or for making wire eyelets. At this stage no attention is necessary in measurements, only that the loop be large enough when welded to band to admit the rectangular end.



Fig. 4.—Radiograph of patient, aged 17 years. Lower second and third molars brought forward. Note regeneration of bone.

The "tailor made fit," light, or heavy friction, as desired, is accomplished by crimping sheath to rectangular end, with any pliers having a rectangular notch (Fig. 1, V).

I use the S.S.W., put on the market for bending the ribbon arch edgewise. This pliers is also ideal for reducing and shaping the round clips on anterior bands.

This method of construction was used in making the orthodontic correction shown in Figs. 2 and 3. The missing six-year molar had been lost by decay. The movement forward, of second and third molars, was started after waiting eight months for regeneration of bone. Note that the radiograph (Fig. 4) shows good regeneration of bone after molars are occupying their new position.

In all cases where there have been extensive movements of teeth, and especially where the tendency is to continue such habits as mouth breathing, thumb-sucking, tongue habits, faulty deglutition, lip biting, etc., I place a "Habit Breaker Gadget," Fig. 1, VI, in the vestibule of the mouth, as a sleeping companion. In the last ten years I have placed several hundred of these, and, like the "Incline Plane Gadget," if they wear it, they get results.

More recently I have been employing the gadget in some selected borderline cases with rather favorable results. The gadget is cut from 0.032 semiflexible sheet rubber, to fit the vestibule of the mouth, without infringing on attachment of muscles—bevel the edges.

I keep a supply of molar bands made up for the "Saturday emergency"—No. 16 on the Ney's gauge for the first molar, and No. 12 for the temporary molar. I find these fit about 70 per cent of molar anchorages with only a slight adjustment with the band former.

307 WEST 8TH STREET

COORDINATING THE PREDETERMINED PATTERN AND TOOTH POSITIONER WITH CONVENTIONAL TREATMENT

H. D. KESLING, D.D.S., M.D.S., LA PORTE, IND.

T SHOULD be the ambition and determination of every orthodontist to treat each of his patients in such a manner as to produce the best possible results in tooth arrangement with the least inconvenience to himself and his patient. Any discussion among orthodontists is sure to reveal numerous theories concerning the proper age for treatment and the mechanics for producing any given result. Orthodontic literature presents a variety of techniques for the management of the different types of cases. Colleges offer specialized courses covering the mechanics of various appliances. Nevertheless, much of each orthodontist's time is consumed making appliance adjustments which will contribute little or nothing definite to the final result. There is no way of measuring the inefficiency of orthodontic operations, but a fair estimate would reveal that not more than 15 per cent of the time is spent on operations that are necessary and which will contribute directly to the final result. In the past, it was the common practice to make adjustments weekly, or even daily. This did not allow sufficient time for the tissues to repond fully to the pressures which were being exerted by the appliance before additional changes were administered. With the materials and appliances available today it is possible to make adjustments that will be active over a period of weeks. Barring accidents, so long as these adjustments are carrying the teeth toward the desired results, there is no need for more frequent adjustments.

Calvin Case developed stationary anchorage by preparing rigid attachments for groups of teeth and pinning this anchorage against individual teeth for movement. Using these mechanics, he attempted to move only individual teeth but did not attempt to coordinate group tooth movements. Angle, Ketcham, Mershon, and others visualized the possibilities of group tooth movements. Through appliances which these men developed, we are able to treat cases in much less time through reciprocal tooth movements. Among Tweed's many contributions was his technique for successfully developing and using dynamic or complete arch stationary anchorage. This anchorage paved the way for successful mass movements of teeth. A further step forward, in line with these previous developments in orthodontics, is possible when we develop a predetermined pattern of the proposed tooth positions prior to treatment and coordinate this pattern with treatment. This pattern can be used as a guide for basic treatment with conventional appliances and later utilized for the construction of the Positioner.

Temptation to start treatment before the permanent canines and premolars have erupted is prompted by the idea that more space is needed for these erupting teeth. If this space could be created, it would allow these teeth to assume better positions as they erupt. However, in the writer's experience, this course of treatment has invariably led to disappointment. In crowded arches, unless the first molars are tipped forward, space is gained only by "ballooning out" the teeth and supporting alveolar process, either labially or buccally, without any development or modification of the apical base. This seems to hold true regardless of the age at which treatment is undertaken. Clinical experience proves that it is more practicable to close wide spaces caused by removing teeth than to attempt to create even slight spaces.

Since treatment during the transitional period cannot be considered final, it would seem advisable to undertake major tooth movements after the permanent canines and premolars have erupted into the mouth. Only emergency cases should have earlier treatment. In these cases the early treatment should be considered only as an attempt to aid Nature through the developmental stage. To complete treatment successfully, not infrequently these cases will need major tooth movements after the premolars and permanent canines have erupted.

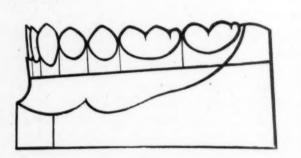






Fig. 1.

Fig. 2.

Fig. 1.—Diagram of case showing vertical and horizontal saw cuts.

Fig. 2.—Diagram of individual teeth, dotted line showing desirable trimming on mesial, distal, and root end.

The predetermined pattern, or setup, for the case should be developed as a part of the preliminary study and used as a guide in diagnosis. Nothing an operator can do can be as enlightening for this purpose as the preparation of such a setup. In treatment we strive to coordinate tooth anatomy with the existing basal bone. There is no better way to visualize this coordination than through the predetermined pattern prepared before treatment is undertaken. If the technique of the setup is carefully executed and care is taken to preserve the tooth anatomy on the plaster models, the result will be sufficiently clearcut as to leave no doubts as to the most desirable course of treatment.

The predetermined pattern is made by dissecting the teeth from a plaster model, and, after trimming them, rearranging the teeth in wax into the desired arch form, axial positioning, and interdigitation (Figs. 1 and 2). The operator is free to move the teeth, within reason, to any position which he thinks

they should assume in the patient's mouth. He should, of course, bear in mind the movements that are possible considering the anchorage available. Also he must know and respect the biologic limitations of tooth movements. With experience he will soon realize the possibilities and limitations of the mechanics used in orthodontics. He will position the teeth on the predetermined pattern into positions which are practical to create in the mouth.

Each case presents a fixed amount of tooth anatomy and also a fixed amount of apical base for its support. If the arch of teeth is crowded or the anterior teeth tipped forward, it is only wishful thinking to hope to create space for their proper positions without carrying some teeth off the apical base. The only alternative is moving the buccal teeth distally, and this is possible only to the extent that the first molars are tipped mesially. If these teeth are upright, any distal movement is a difficult procedure and invariably causes impingement on the space required for the eruption of the third molars. If the apical, or bony, base is narrow in the premolar area, it is reasonable to expect that the arch of teeth will also be narrow and, regardless of the treatment instigated, Nature will again bring these teeth back to about the original relationship. When we recognize our limitations so far as bony development is concerned, we will never attempt tooth movements which will leave teeth off the apical base or in axial positions that are not stable. This makes the problem of elimination of some dental units quite simple and, whether we like it or not, we must admit that it is necessary to remove some units in a high percentage of all cases of malocclusion, and especially in Class I cases.

When repositioning the teeth in wax they should be kept upright over the apical base. It is possible when constructing the predetermined pattern to eliminate some teeth and position the others. Before truly efficient treatment can be instigated, such fundamental decisions must be made. What could be a more dependable guide for reaching such decisions than an exact reproduction of the teeth coordinated with the existing apical base? When decisions are based on such concrete evidence, percentages of successful treatment will mount as compared with cases treated by those wishful thinkers who are still hoping to create basal bone where it is not.

If two premolars are removed from the mandibular arch, it is very poor technique to draw back the six anterior teeth, positioning them off the apical base in order to place the canines in contact with the second premolars (Figs. 3 and 4). Such tooth positioning is almost impossible to reproduce in the mouth, because reciprocal action will carry the buccal teeth forward to some extent while moving the anterior teeth to the posterior. In most cases it would even be advantageous to have these buccal teeth move mesially in such treatment. In accordance with the movements desired and the movements possible with present mechanics, we would, on the predetermined pattern, position the buccal teeth forward as well as the anterior segment toward the posterior (Figs. 5 and 6). Therefore, by making a predetermined pattern, an operator has a better concept of the treatment desired for a particular case and can more efficiently plan and execute active treatment.

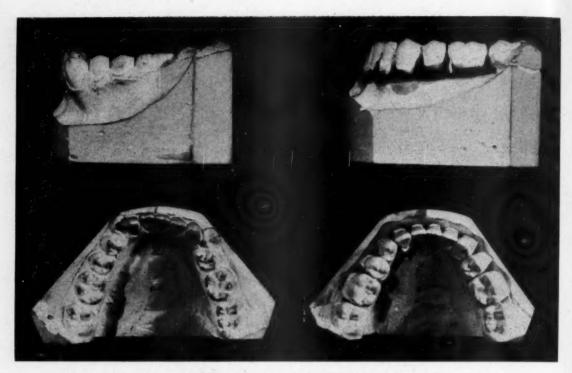


Fig. 3.—Left side of original and setup models showing cuspid moved into the space of the first premolar, throwing the anterior teeth too much to the lingual.

Fig. 4.—Occlusal view of models shown in Fig. 3.

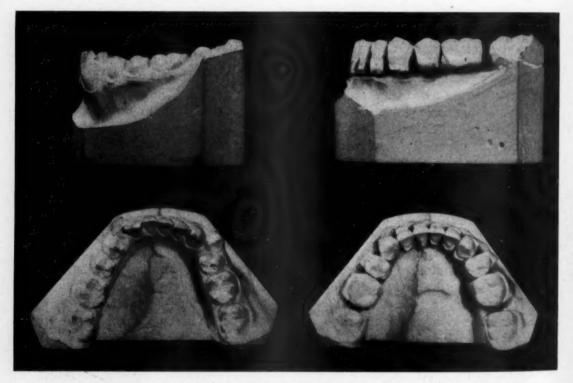


Fig. 5.—Left side of original and setup models showing correct positioning of the teeth over basal bone.

Fig. 6.—Occlusal view of models shown in Fig. 5.

By knowing the exact movements necessary for completion of treatment, anchorage problems become simplified. In order to control the teeth, it is necessary to have some rigid attachment to each individual tooth. At the present time there is no practical means of attaching to the teeth other than by banding. Perfect bands do not necessarily mean good orthodontics nor the most desirable finished result. At the best, bands and attachments can only be considered temporary and as a means, during treatment, of attaching to the individual teeth. Many operators overestimate the necessity of making and placing perfect bands and devote more time to this part of the technique than to the more important part—the manipulation of the appliance. Usually the leveling off and lining up of the teeth can be accomplished with one adjustment, by applying a very small high-tempered arch wire. This is only possible if enough time is allowed for the tissues to repond to this light force.



Fig. 7.-X-ray showing second premolar and cuspid roots after treatment.

Treatment of both arches can be carried on together, bearing in mind that the mandibular teeth should advance toward the predetermined pattern and stationary anchorage somewhat ahead of the maxillary teeth. Adjustments should be made which will definitely cause the teeth to progress toward the predetermined pattern and which will not cause unnecessary tooth movements in any other directions. With the mechanisms we have at hand for creating such movements, it is quite possible to make adjustments that will be active over a period of three or four weeks. Such an adjustment need not be unusually severe but of such a nature that the action will be continuous. Too frequent adjustments are a waste of time and a source of discomfort to the patient. Most orthodontists have had experiences where it has been impossible to see a patient for a period of eight to ten weeks because of illness. When the patient returned, the changes that had taken place in the absence of regular appliance adjustments were surprisingly good.

We must learn the possibilities of our treating mechanism. We must make

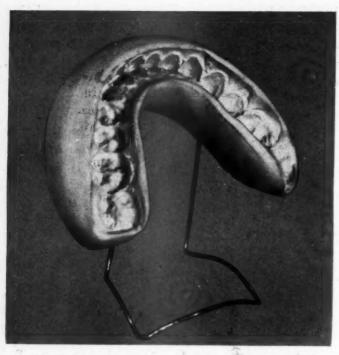


Fig. 8.—Tooth-positioning appliance.

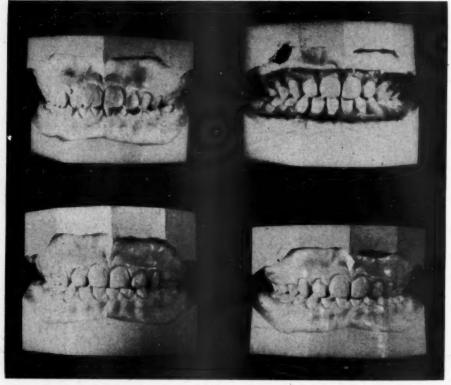


Fig. 9.—Front view. Upper left, original. Upper right, setup model. Lower left, basic treatment. Lower right, finished case.

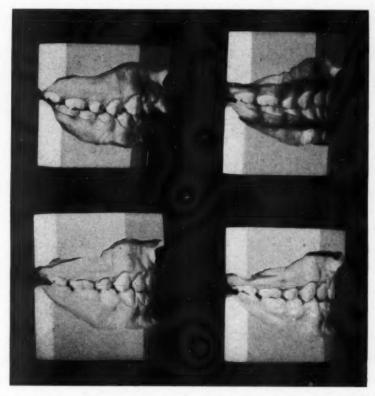


Fig. 10.—Right side. Upper left, original. Upper right, setup model. Lower left, basic treatment. Lower right, finished case.

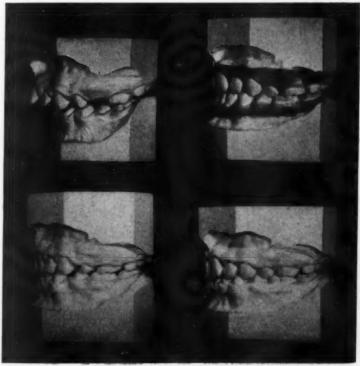


Fig. 11.—Left side. Upper left, original. Upper right, setup model. Lower left, basic treatment. Lower right, finished case.



Fig. 12.—Upper occlusal. Upper left, original. Upper right, setup model. Lower left, basic treatment. Lower right, finished case.

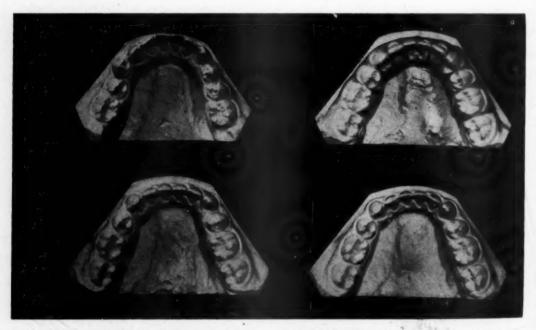


Fig. 13.—Lower occlusal. Upper left, original. Upper right, setup model. Lower left, basic treatment. Lower right, finished case.

adjustments accordingly and allow enough time for this stored-up energy to create tissue changes and desired tooth movements. There is less damage to tissue when we know by a predetermined pattern the desired position of each tooth and through the mechanism carry the tooth only toward that predetermined position.

Major tooth movements are completed when the teeth are properly rotated and approaching their normal axial inclination and interdigitation. It seems entirely unnecessary to prolong conventional treatment after these positions have been accomplished. It is necessary, however, in the case of extractions, to parallel the roots of the teeth that are being moved into the space of an extracted tooth (Fig. 7).

During basic treatment the predetermined pattern should be duplicated in artificial stone and these models used to fabricate a tooth-positioning appliance for the final artistic positioning (Fig. 8). As the end of conventional treatment approaches, the function of the tooth-positioning appliance should be explained, both to the parents and to the child. The patient should be informed of his responsibility with regard to the wearing of this finishing appliance. The operator, the patient, and the parents should collaborate on a definite schedule for the patient's wearing of the Positioner. The patient should practice four hours of exercise wearing daily as well as wearing the Positioner while sleeping at night. To be most effective, the appliance should be placed immediately after the removal of the conventional appliance. At this time the teeth are unstable from active treatment and are susceptible to the gentle forces of the tooth-positioning appliance.

If the Positioner is worn as directed, slight rotations will be corrected, spaces will be reduced, and the arch form and axial positioning of the teeth will approach that of the predetermined pattern in three or four weeks' time. At this time it will be necessary to decide whether the patient is to wear the Positioner as a retainer for a few weeks or whether it is a case that is going to require prolonged retention. If it is the latter, a conventional type of retainer should be constructed and coordinated with the Positioner.

Orthodontic treatment should be instigated at the most opportune time. With the exception of emergency cases this would be when the premolars and permanent canines are erupted. At this time it is possible to develop a predetermined pattern of the case. This will serve as a valuable diagnostic aid, as a guide through basic treatment, and as a form over which the tooth-positioning appliance can be constructed. With the predetermined pattern the operator can more efficiently plan and execute the major tooth movements with fewer appointments and less inconvenience to himself and the patient. Many of the one hundred results to be shown in the clinic session of this meeting have been accomplished with from fifteen to eighteen basic treatment appointments. It seems well within the realm of possibility that in the future most orthodontic cases can be successfully treated with twelve to fifteen basic treatment appointments. This can be accomplished, however, only if the operator first determines his goal and then coordinates all of his efforts toward that end.

⁹¹⁰ INDIANA AVENUE

INDIRECT-DIRECT BAND AND APPLIANCE TECHNIQUE

LOWRIE J. PORTER, D.D.S., NEW YORK, N. Y.

SINCE the previous presentation of this clinic,* a decided change in technique has been made. The present technique is such a great improvement over that previously reported that several of my friends have requested that it be submitted as a supplementary report.

The objection to all previous indirect band techniques has been the fact that the degree of accuracy of fitting bands depended very largely on the ability of a technician in the carving of tooth anatomy. If the carving was inaccurate, the band would not fit perfectly, and this in turn frequently necessitated considerable time in adjustments if the operator was particular in the minute details of inserting only appliances which were of a high degree of perfection. If individual tooth models were made from individual tooth impressions, it involved considerable work and time, and since many of these techniques required a second visit of the patient for band fitting and a third visit for appliance placement, there was actually very little, if any, saving in time over the direct band technique.

Any indirect band technique should be a timesaver for the operator, should be an advantage to the comfort of the patient in band fitting, and should allow the placement of appliances at the second visit of the patient.

The following method has all the advantages of indirect technique with the permission of a final band fitting directly on the patient's teeth, thus assuring a definite perfection of fit before cementation.

- 1. First visit of patient:
 - a. Colloid impressions are taken of both upper and lower teeth with Coe-loid impression material.† We use this material because it has good body stability and lends itself well to the repouring of several casts when desired.
 - b. Radiograms are taken.
 - c. Photographs are taken at either this or the second visit.
 - d. Separations are placed.
- 2. Intervening laboratory technique:
 - a. Laboratory technician pours the colloid impression with a stone plaster for a working east.
 - After separation, the impression is washed and repoured for a record cast.
 - c. The molar teeth are now carved as accurately as is reasonably possible, and Johnson loop molar bands are placed over these teeth and burnished to fit the tooth. The loop is pinched up somewhat but is not pinched tight (Fig. 1).

^{*}This is a supplementary report of a clinic given at the meeting of the American Association of Orthodontists, April 25, 1944, and published in the American Journal of Orthodontics and Oral Surgery of March, 1945.

[†]Manufactured by Coe Laboratories, Chicago, Ill.

d. The lingual tubes are soldered to the bands and the appliance constructed (Fig. 2).

e. If a labial appliance is to be used, it is made to fit the cast, but the buccal tubes are not attached at this time.



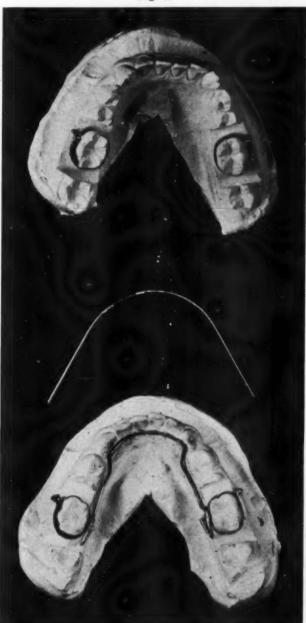


Fig. 2.

3. Second visit of patient:

a. The entire appliance is placed on the teeth and the bands pushed to place. There should be very little fitting to be done as the bands have been previously burnished to the teeth on the cast which (with a colloid impression) is very accurate.

b. The molar loops are now pinched tight while on the teeth.

This is the main change in technique for the loop bands entirely eliminate the possibility of error in tooth carving, which was so essential in the technique previously given. In the previous method it was frequently necessary to change the band, either making it larger or smaller, depending upon how accurately the technician had carved the tooth anatomy.

The loop band takes care of any inaccuracy in carving and gives an excellently fitting band with no discomfort to the patient and a tremendous saving of energy on the part of the operator.

c. The bands and appliance are now removed, the loops are pinched flat and soldered. The pinch joint is ground down, the appliance replaced on cast (trimming the plaster teeth smaller if necessary in replacing the bands), and the buccal tubes soldered (Fig 3). Holding the buccal tubes on a straight wire for soldering gives an accurate placement. The labial appliance, previously made, is then placed in the buccal tubes and made passive. The entire soldering procedure should not take over ten minutes at most.

d. The appliance can now be cemented to place.

e. The lingual appliance should be removed after cementation, to be sure that it is passive in position.



Fig. 3.

This method allows both upper and lower appliances to be placed at the second visit of the patient and makes more accurately fitting bands by a much simpler technique.

The help of a laboratory technician is a great timesaver. The operator first fits the bands and appliance on one arch, pinches the loops, and gives the appliance to the technician. While the operator is fitting the bands to the other arch, the technician is finishing the first appliance (soldering the loops and buccal tubes). The operator is then ready to give the second appliance to the technician, and the technician gives the operator the first appliance for cementing. By the time the first appliance has been cemented and the teeth cleared of excess cement, the technician will have finished the second appliance and it will be ready for cementation.

⁴¹ EAST 57TH STREET.

Editorial

The Silver Anniversary Meeting of the Southwestern Society of Orthodontists

The Silver Anniversary meeting of the Southwestern Society of Orthodontists was held in Oklahoma City at the Skirvin Hotel, Jan. 21, 22, and 23, 1946.

In that colorful part of the United States, famed in story by Emerson Hough, where skyscrapers and oil derricks now dot the sky, a meeting of orthodontists was held, commemorating twenty-five years of existence.

Thirty-five years previous, there was not an orthodontist between New Orleans and the Pacific Coast, not a specialist in orthodontics between Kansas City and the Gulf of Mexico or between Denver and Mexico City. Today the Southwestern Society boasts a membership of eighty members, all located in this vast area of the Southwest, showing that orthodontics as a specialty is making rapid progress.

At the suggestion of T. O. Gorman and T. G. Duckworth of San Antonio, Texas, a handful of men met at the Adolphus Hotel in Dallas, in the spring of 1920, to organize the Southwestern Society of Orthodontists. At the organization meeting the following were in attendance: O. E. Busby, Dallas; W. T. Chapman, El Paso; A. B. Conly, Dallas; T. G. Duckworth, San Antonio; T. O. Gorman, San Antonio; C. M. McCauley, Dallas; P. G. Spencer, Waco; and E. B. Arnold, Houston.

The Society was formed with T. O. Gorman as the first president and W. T. Chapman as secretary-treasurer. It was voted that the first annual meeting be held at the time of the Texas State Dental Society meeting in Dallas in the spring of 1921. T. G. Duckworth was program chairman for the first meeting and arranged for Albert H. Ketcham to appear as the guest clinician.

With that beginning, the Southwestern Society was born, and it was destined to grow into one of the outstanding and active components of the American Association of Orthodontists.

Obviously, there has been born among the members of this organization a fellowship that has grown into a "How-can-I-help?" attitude, and its enthusiasm is amply reflected in the activities of the society.

The Silver Anniversary meeting got off to a rapid start on Sunday evening with a reception and dinner honoring President Harry Sorrels.

Dr. Sorrels opened the meeting the next morning with the Presidential Address and recommended that the society create a one-year scholarship in orthodontics to be given to a graduating senior in the dental field in the area comprising the territory of the Southwestern Society of Orthodontists.

The veterans of the late war were welcomed home by T. G. Duckworth, and the history of the Society was then reviewed by Paul G. Spencer. He was followed by Archie B. Brusse, President of the American Association of Orthodontists, W. E. Flesher, and H. C. Pollock.

One of the innovations of the meeting was a kind of orthodontic "Town Meeting of the Air" discussion of the Oppenheim Theory of Bone Metabolism. This was directed by William R. Humphrey of Denver, as moderator, and the following group were seated about the table: George R. Moore, George R. Warner, Wayne White, W. E. Flesher, Ed Arnold, and George Nagamoto.

This was promptly followed by the subject of "Diagnosis and Prognosis," by George R. Moore, chairman of the Department of Orthodontics, School of Dentistry, University of Michigan.

Following this there was another innovation, a business forum directed by Brooks Bell of Dallas, Texas, who enjoyed the thorough cooperation of T. W. Sorrels of Oklahoma City.

Tuesday morning was devoted to a series of interesting table clinics, after which L. A. Lucas of Oklahoma City spoke on "Treating Injuries of the Teeth of Children." George Moore spoke on "Diagnosis and Prognosis," and he was followed by George R. Warner of Denver, Colorado, who spoke on the subject of the technique of intraoral dental x-rays. He stressed the angulation necessary for the different face forms.

On the final day there were lectures by George R. Moore of Ann Arbor, Michigan; Paul G. Spencer of Boerne, Texas; and George R. Warner of Denver, Colorado.

Officers of the society elected to serve in 1946 are: Brooks Bell, Dallas, Texas, President, replacing Harry Sorrels, Oklahoma City; J. C. Williams, Fort Worth, Texas, Vice-President; and J. O. Bailey, Wichita Falls, Texas, Secretary-Treasurer. President-Elect is R. E. Olson of Wichita, Kansas. Elected to the board of directors were Homer B. Robinson, Hutchinson, Kansas, representative of the board of the American Association of Orthodontists; J. S. Cunningham, Houston, Texas, chairman of the board of censors; G. C. Turner, Lubbock, Texas, chairman of the advisory committee; and C. W. Williams, Shreveport, Louisiana, chairman of the public relations committee.

A resolution was passed unanimously at the business session, inviting the members of the Rocky Mountain Society of Orthodontists residing in Colorado and New Mexico to join the Southwestern Society of Orthodontists.

Should this invitation meet the approval of the Rocky Mountain Society, they will in turn petition the American Association of Orthodontists to assign Colorado and New Mexico to the Southwestern Society and the other states comprising the Rocky Mountain Society to the Pacific Coast group.

The Silver Anniversary of the Southwestern Society, in celebration of twenty-five years of an active and vigorous existence, was a great success, and it is no doubt destined to celebrate its golden anniversary at the end of another twenty-five years.

H. C. P.



Honor Roll of Active Members American Association of Orthodontists Serving in the Armed Forces

Dr. Herman Adelstein Cleveland, Ohio Dr. C. A. Allenburger New Orleans, La. Dr. E. W. Anderson Cedar Rapids, Iowa Dr. Walter Appel
Cheyenne, Wyo.
Dr. Richard E. Barnes
Cleveland, Ohio Dr. Harvey G. Bean Toronto, Ont., Can. Dr. Henry C. Beebe Boston, Mass. Dr. George F. Bowden Denver, Colo. Dr. W. A. Buhner St. Petersburg, Fla. Dr. Harry Cimring Los Angeles, Calif. Dr. Allen Collins Detroit, Mich. Dr. R. Burke Coomer Louisville, Ky. Dr. Willard D. Crapo Los Angeles, Calif. Dr. Wm. B. Currie Indianapolis, Ind. Dr. Arlo M. Dunn Omaha, Neb. Dr. George L. Englert Camp Grant, Ill. Dr. Frederick M. Epley San Francisco, Calif. Dr. Marion A. Flesher Oklahoma City, Okla. Dr. Laurence Furstman Los Angeles, Calif. Dr. Raymond Gillespie Fort Knox, Ky.

Dr. Paul E, Gilliam
Houston, Texas

Dr. Dennis D. Glucksman
New York, N. Y.

Dr. R. T. Goldsmith Houston, Texas Dr. Charles J. Goldthwaite Worcester, Mass. Dr. Harold S. Grohosky

Galveston, Texas

Dr. Murray M. Hall Houston, Texas Dr. Hammond L. Johnston Baltimore, Md. Dr. Claude S. Jones Johnson City, Tenn. Dr. William R. Joule Kearney, N. J. Dr. Matthew M. Kaufman New York, N. Y. Dr. Frank J. Krivanek Oak Park, Ill. Dr. Harley G. Kushel Rochester, N. Y. Dr. Leo B. Lundergan St. Louis, Mo. Dr. Percy H. Lunn
Buffalo, N. Y.
Dr. Robert MacConkey
Rochester, N. Y.
Dr. Joseph L. McDowell
Ossining, N. Y.
Dr. John W. Makeig Amarillo, Texas
Dr. Charles Mason New York, N. Y. Dr. Michael J. Maxian New York, N. Y. Dr. Herbert V. Muchnic Los Angeles, Calif. Dr. Marcus D. Murphey
Houston, Texas
Dr. G. W. Oglestone
Saginaw, Mich.
Dr. Reuben E. Olson Wichita, Kansas Dr. J. D. Peak Austin, Texas Dr. William Adams Pressly Greensboro, N. C. Dr. E. B. Pulliam Corpus Christi, Texas Dr. Joe Tennyson Reece New York, N. Y. Dr. Paul V. Reid Philadelphia, Pa. Dr. John W. Richardson Cleveland, Ohio Dr. J. A. Rowe San Antonio, Texas

Honor Roll of Active Members American Association of Orthodontists Serving in the Armed Forces

(Continued)

Dr. Earl E. Shepard
St. Louis, Mo.
Dr. Carl H. Showalter
Santa Cruz, Calif.
Dr. Milton Siegel
Albany, N. Y.
Dr. Saul Simon
Toronto, Can.
Dr. L. Scroggs Singleton
Los Angeles, Calif.
Dr. Arnold E. Stoller
Seattle, Wash.
Dr. Martin S. Strickler
Chicago, Ill.
Dr. Bernard F. Swain
Morristown, N. J.
Dr. Jack Taylor
Santa Monica, Calif.

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There may be members in the Service whose names do not appear in the above list. These members should notify the secretary at once so that their names may be included.

Max E. Ernst, Secretary, American Association of Orthodontists, 1250 Lowry Medical Arts Bldg., St. Paul, Minn.

Department of Orthodontic Abstracts and Reviews

Edited by Dr. J. A. SALZMANN, NEW YORK CITY

All communications concerning further information about abstracted material and the acceptance of articles or books for consideration in this department should be addressed to Dr. J. A. Salzmann, 654 Madison Avenue, New York City

Penicillin Therapy, Including Tyrothricin and Other Antibiotic Therapy: By John A. Kolmer, M.S., M.D., Dr.P.H., Professor of Medicine in the School of Medicine and the School of Dentistry, Temple University; Director of the Research Institute of Cutaneous Medicine; Formerly Professor of Pathology and Bacteriology, Graduate School of Medicine, University of Pennsylvania. New York, D. Appleton-Century Co., Inc., 1945.

Kolmer realizes that much is still to be learned about penicillin in the prevention and treatment of disease, especially in relation to its dosage and administration. This volume has been prepared for use by both the medical and dental profession and includes information on the physical characteristics and methods of production of penicillin, tyrothricin, gramicidin-S, and other antibiotics, Antimicrobial characteristics of penicillin in vitro and in vivo are discussed, as are its pharmacology and toxicity. Specific information is supplied on the administration and dosage. The principles of penicillin therapy are discussed. With regard to the use of penicillin in dentistry, Kolmer finds that while

With regard to the use of penicillin in dentistry, Kolmer finds that while a great majority of the microorganisms found in the mouth are susceptible to penicillin, there is a great deal of clinical research still needed to establish its true value in this field. Kolmer is of the opinion that penicillin in sterile saline solution is well tolerated by the mucous membranes and wounds. Useful dental application, it is predicted, may also be found in creams when employed for dry sockets and in root canals. This is a highly authoritative book which should prove useful to the dentist assaying to use antibiotics.

Juvenile Dentistry: By Walter C. McBride, D.D.S., Associate Professor of Operative Dentistry and Director of the Department of Pedodontics, School of Dentistry, University of Detroit; Visiting Lecturer on Children's Dentistry, Postgraduate Division School of Dentistry, University of Michigan. With Special Chapters by: James Nuckolls, D.D.S., Professor of Operative Dentistry and Chairman of the Operative Division, College of Dentistry, University of California; C. Taylor Hall, D.D.S., Professor and Director of the Department of Oral Surgery, School of Dentistry, University of Detroit; Harold V. Dwyer, B.S., M.D., Lecturer in Medicine, School of Dentistry, University of Detroit. Fourth edition, thoroughly revised, Octavo, 359 pages, illustrated with 298 engravings. Cloth, \$6.00. Philadelphia, Lea & Febiger, 1945.

In the foreword to this widely accepted book, William R. Davis, Director, Bureau of Mouth Hygiene, Michigan Department of Health, points out that "Juvenile Dentistry has been sadly neglected by the rank and file of the pro-

fession because years ago it was considered unimportant, and because today many dentists have not learned how to practice it adequately or profitably." To this may be added the fact that many dentists are putting off appointments of child patients and thereby undermining their own professional future. The present book gives discussion to the management of the child and the management of the office, in addition to the usual subjects dealing with examinations, diagnosis, pulp management in the deciduous teeth, and the various operative procedures.

Valuable chapters are included on physical diagnosis and the morphology of the deciduous teeth. It is the understanding of this reviewer that the use of restraining devices as a means for stopping thumb-sucking has long been ap-

proved by child psychologists and pediatricians.

Preventive orthodontics has suffered to date from a superabundance of trick gadgets and a dearth of detailed and intelligent discussion. It is time that we recognized the fact that the dentition of the child must be considered in time as well as in space. The use of static appliances can produce worse malocelusion than that which they are attempting to correct.

This edition of McBride's book has been especially enhanced by the contribu-

tions of Drs. Nuckolls, Hall, Dwyer, Easlick, and Seyler.

Physical Growth in Childhood and Military Fitness: By A. Ciocco, Am. J. Pub. Health 35: 927-933, September, 1945.

The purpose of this analysis by Ciocco is to learn whether men who have been disqualified for military service differed in childhood physical growth from men who have been accepted.

The records of stature and weight are those collected at Hagerstown, Maryland, during the school years, 1923 to 1927, and since 1933, by the United States Public Health Service. Only records for white children have been used.

Public Health Service. Only records for white children have been used.

There were found 1,631 weight and stature measurements on Selective Service registrants. They were grouped in the following three categories:

Physically fit.
 Disqualified—4F.

3. Deferred—in other classifications.

It is well-known fact that for some time there has been an upward trend in weight and stature of children. Considering the measurements taken in 1923 to 1927, that is, about twenty years before the Selective Service examination, one notes that at each age except 11 years, the boys who later were disqualified for military service were lighter on the average than the boys who passed the physical examinations. The average difference between fit and disqualified boys varies from 0.9 pound at 10 years of age, to 3.9 pounds at 12 years.

A similar comparison for measurements taken in 1933 to 1937, and 1938 and later, reveals differences in the same direction but they are more marked.

In the three series of measurements the combined differences between the boys who were later accepted and those who were disqualified for military service are just as striking. The consistency in the direction of the differences warrants the conclusion that the boys who were later to be disqualified for military service were as a group lighter in weight than the boys who eventually qualified for military service. These findings all point to an association between growth in childhood and development of physical defects, leading to disqualifications for military service.

It was also observed that the boys who later were found fit for military service were taller than the boys who were disqualified. The consistency in the

direction of the differences makes it appear that the disqualified men as children were already differentiated in growth of stature from the children who were

later to be found fit for military service.

The data reveal that in general at each age boys who were later disqualified for military service were on the average lighter and shorter than the boys who were found qualified. The findings are the same whether one compares the boys measured twenty years or only two years before being examined for

military service.

It was found that children with carious teeth, diseased tonsils and adenoids, defective vision, and with enlarged cervical and submaxillary glands were smaller than children without such defects. The conclusion would seem warranted that the measurement of growth has a definite value as an index of physical status in general and can be effectively employed as one method of "screening" children with physical defects. It is found that the percentage of disqualifications was highest among boys who deviated the most in the direction of underweight from average weight of their age group.

The disqualified men have certain defects, and a positive association has been found between the development of these defects and retarded growth in child-

hood.

This study illustrates that child hygiene work is important for the health and welfare of the population, and that all effort which will increase the

physical well-being of children will result in healthier adults.

School health programs have been instituted without a clear conception or definition of the main goal, and consequently they have not received the required support from parents, school and health authorities. The result of this study should provide a further stimulus to the appraisal of school health programs in relation to what they aim to do and what they actually accomplish for the health of children.

News and Notes

Columbia University, School of Dental and Oral Surgery of the Faculty of Medicine

The School of Dental and Oral Surgery of the Faculty of Medicine, Columbia University, announces the establishment of a limited number of fellowships for graduates of dental schools. These fellowships will offer opportunity for study in the following basic science departments of the University: Anatomy, Bacteriology, Biochemistry, Pathology, Pharmacology, Physiology.

For further information regarding qualifications and stipend, address the Dean of the Faculty of Medicine, Columbia University, 630 West 168th Street, New York 32, New York.

Pacific Coast Society of Orthodontists

The Pacific Coast Society of Orthodontists will hold its convention in San Francisco, California, May 27, 28, and 29, 1946.—Dr. Earl F. Lussier, Secretary, 450 Sutter Building, San Francisco, California.

American Association of Orthodontists

The next meeting of the American Association of Orthodontists will be held at the Broadmoor Hotel, Colorado Springs, Colorado, Sept. 30, Oct. 1, 2 and 3, 1946. Members of the American Dental Association are invited to attend this meeting. Proper credentials should be obtained in advance from the secretary of the American Association of Orthodontists or from the secretary of a constituent society.—Max E. Ernst, Secretary, 1250 Lowry Medical Arts Bldg., St. Paul 2, Minn.

It has been announced that the Antlers Hotel, in Colorado Springs, Colorado, is in a position to take care of guests for the meeting of the American Association of Orthodontists who may be unable to secure accommodations at the Broadmoor, the headquarters hotel. Reservations should be made quite some time in advance.

American Board of Orthodontics

The 1946 meeting of the American Board of Orthodontics will be held at the Broadmoor Hotel, Colorado Springs, Colorado, Sept. 26, 27, 28, and 29, 1946. Orthodontists who may desire to be certificated by the Board may obtain application blanks from the Secretary, Dr. Bernard G. deVries, 705 Medical Arts Building, Minneapolis 2, Minnesota.

New York Society of Orthodontists

The next meeting of the New York Society of Orthodontists will be held at the Waldorf-Astoria Hotel, New York, on Monday and Tuesday, Nov. 4 and 5, 1946.

Prize Essay Contest, American Association of Orthodontists

The Research Committee of the American Association of Orthodontists has been empowered by the Board of Directors to conduct a prize essay contest.

Eligibility.—Any student enrolled in a recognized university or any person who has completed his or her formal education in orthodontics not more than three years prior to June 1, 1946, is eligible to compete for the prize.

Essay.—The essay must represent a piece of original research having a direct bearing on the field of orthodontics. It may relate either to a biologic or clinical problem and may represent material that has been offered in partial fulfillment of the requirements of a graduate or postgraduate degree, or any graduate, postgraduate, or undergraduate contest. No papers previously submitted and now published or in press will be accepted for the present contest. All essays must be in the hands of the committee by June 30, 1946. If no essay is deemed worthy by the committee, the prize will be withheld.

Award.—The prize has been set at \$200.00; in addition to this, the traveling expenses of the winning essayist to and from the meeting will be paid. The essay will be accorded a place on the scientific program of the annual meeting of the Association at Colorado Springs, Sept. 30, 1946, and the prize will be awarded at this time. The Association will retain publication rights on the first three choices.

For further information, address: ALLAN G. BRODIE, Chairman, Research Committee, A.A.O., 30 North Michigan Avenue, Chicago 2, Ill.

American Dental Association Membership Committee and Dental Students

So that organized dentistry may maintain its strength in representing the dental profession of this country in all of the current and future legislative and social problems, the Membership Committee of the American Dental Association is intensifying its efforts to enroll dental students immediately after their graduation from dental school as full-fledged members. This program was initiated in 1934 by the establishment of the Junior Membership Plan. Under this program, many of the benefits of actual membership are given to dental students before graduation. These benefits include the right to the use of library facilities of the Central Office and an annual subscription to the Journal of the American Dental Association.

In order to have Junior Members keep pace with current problems in dentistry, the annual Junior Membership Essay Contest was established in 1941. Undergraduate members are eligible to submit an essay on a topic assigned by the committee. These essays are then judged and prizes awarded. The prize-winning essays are usually published in the JOURNAL. Dr. Robert R. Gillis, Hammond, Indiana, is the present chairman of the Junior Membership Essay Contest.

The Membership Committee, according to Dr. Paul Zillman, chairman, is also studying the possibility of changing the name "Junior Member." Suggestions have been made that greater accuracy in designation would be shown if these members were known as "student members" or "undergraduate members." It is likely that this change will be submitted at the next annual meeting for action.

The Junior Membership Campaign has been given notable aid by the cooperation of many dental schools. In some of these, enrollment in the Junior Membership Plan is a stated requirement. Additional support from these sources will be enlisted by the Membership Committee which is now designing a program of such action.

American Dental Association, House of Delegates Meeting

That the 1946 annual meeting of the House of Delegates of the American Dental Association will be held in Miami, Florida, on October 14, 15, and 16, was reaffirmed by

the Board of Trustees at a special meeting in Chicago on April 13. At the close of the meeting, the Board issued the following statement:

"At the meeting of the Board of Trustees of the American Dental Association, Feb. 8-10, 1946, in Chicago, it was voted to hold the 1946 meeting of the House of Delegates in Miami, Florida. This action of the Board was received somewhat critically in several quarters owing to the location of the convention city and the time and expense involved in making such a trip. Some of these statements were transmitted officially to President Walter H. Scherer, who called a special meeting of the Board of Trustees in Chicago, April 13. The Board of Trustees welcomed this opportunity to review the situation in the light of any new facts that might have been revealed since the time of the previous action of the Board.

"At the special meeting of the Board, at which all members were in attendance, the entire problem was reviewed. The members of the Board unanimously reiterated the desire, expressed at the February meeting, to hold a full scientific meeting in order to bring the benefits of such a convention to its members who had not had such an opportunity during the wartime years. After a careful canvass of the situation, including the present and probable future status of transportation and hotel accommodations in various parts of the country, the members of the Board of Trustees unanimously agreed that the holding of a full scientific meeting was impossible during 1946 because no city could satisfactorily provide the necessary facilities.

"The Board of Trustees then proceeded to a full examination of the various statements that had been made on the decision to hold the meeting in Miami. The Board then voted to reaffirm its decision to hold the 1946 meeting of the House of Delegates in Miami. Among the considerations which prompted the action of the Board of Trustees were the following:

"1. Examination of the facilities at Miami had been made by a special committee of the Board of Trustees and had been found to be satisfactory in every respect. The report of this special committee follows:

Pursuant to instructions of the Board of Trustees, your committee has inspected the facilities at Miami, Florida, for holding of a House of Delegates Meeting

gates Meeting.

Ample accommodations have been guaranteed in three hotels—McAllister, Columbus, and Everglades. The McAllister and the Columbus are adjoining and connected by an arcade; the Everglades is two blocks away. These hotels operate on the European plan. They have submitted their

These hotels operate on the European plan. They have submitted their regular convention, off-season rates: single rooms from \$3.00; twinbedded rooms from \$6.00.

The prices of meals in Miami are comparable to the price of meals in any

of our larger cities.
The dates of October 14, 15, and 16 have been reserved.

(Signed) CLYDE E. MINGES JOHN J. HOLLISTER HARRY B. PINNEY

- "2. The usual agreements between the Association and the hotels of the convention city would afford delegates and alternates full protection against unwarranted increases in rates for hotel accommodations. Hotel rates would be published in the usual manner as soon as possible so that individual selection of accommodations could be made.
- "3. The general cost of the meeting would not exceed that which had been necessary when the American Dental Association convened in other cities located on the extreme borders of the United States: San Francisco, Boston, New Orleans, Atlantic City and Los Angeles.
- "4. The Fifth Trustee District, which includes Miami, was one of the two Trustee Districts which had never been given the privilege of being host to the Association convention. It was shown, additionally, that the Fifth Trustee District did not have

within its boundaries at the present time a city with sufficient hotel and convention accommodations to care for a full scientific meeting. Thus, if the 1946 meeting were transferred, it was not likely that the Fifth Trustee District, which has loyally supported meetings in all other parts of the country, would ever be able to entertain the delegates and alternates of the American Dental Association.

"5. Since the state of Florida and the City of Miami afford unexcelled opportunities for vacation, it was thought that many delegates and alternates would like to utilize the

1946 meeting for such purposes.

"In view of all of these considerations, the Board deemed it proper to reaffirm its vote to hold the 1946 meeting of the House of Delegates in the city of Miami and set the dates of October 14-16 for that purpose. The Board of Trustees also expressed the desire that all constituent societies plan now to have full delegations in attendance at this meeting since many problems, created or deferred by the war, will be under consideration."

Notes of Interest

Dr. W. R. Alstadt, 610 Boyle Building, Little Rock, Arkansas, announces that he has been discharged from the Army and that his practice is now limited to orthodontics.

Robert E. Coleman, D.D.S., M.S., announces his return to the practice of orthodontics at 1145 David Whitney Building, Detroit, Michigan, following duty in the United States Army.

Dr. Andrew Francis Jackson announces the return of his son, Dr. John Mather Jackson, to his former association with him in the practice of orthodontics, 1218 Medical Arts Building, Philadelphia 2, Pennsylvania.

J. E. O'Donnell, D.D.S., announces his return to the practice of orthodontics at 401 North Emporia, Wichita, Kansas, after service with the United States Army.

Dr. Charles E. Presnell, D.D.S., M.S., announces the opening of an office at 312 Humboldt Building, Grand and Washington Boulevards, St. Louis 3, Missouri. Practice limited to orthodontics.

Dr. Charles F. Russell, orthodontist, announces the reopening of his offices at 1017 Professional Building, Waco, Texas.

Dr. Earl W. Swinehart wishes to announce the return of Dr. D. Robert Swinehart as associate in his offices, 716-717 Medical Arts Building, Baltimore 1, Maryland. Practice limited to orthodontics.

Dr. Leland T. Daniel and Dr. George F. Wilson announce their association in the exclusive practice of orthodontics, at 407-8 American Building, Orlando, Florida.

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OFFICERS OF ORTHODONTIC SOCIETIES

The American Journal of Orthodontics and Oral Surgery is the official publication for the American Association of Orthodontists and the following component societies. The editorial board of the American Journal of Orthodontics and Oral Surgery is composed of a representative of each one of the component societies of the American Association of Orthodontics.

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President, Frederic T. Murlless, Jr. - - 43 Farmington Ave., Hartford, Conn. Vice-President, Joseph D. Eby - - 121 E. 60th St., New York, N. Y. Secretary, Bernard G. deVries - - Medical Arts Bldg., Minneapolis, Minn. Treasurer, Oliver W. White - - 213 David Whitney Bldg., Detroit, Mich. James D. McCoy - - 3839 Wilshire Blvd., Los Angeles, Calif. Claude R. Wood - - Medical Arts Bldg., Knoxville, Tenn. James A. Burrill - 25 E. Washington St., Chicago, Ill.

In the January issue each year, the American Journal of Orthodontics and Oral Surgery will publish a list of all of the orthodontic societies in the world of which it has any record. In addition to this, it will publish the names and addresses of the officers of such societies.